THE LANCET.

VOL. II.] LONDON, SATURDAY, SEPTEMBER 10, 1842. [1841-42.

THE PHYSIOLOGY AND PATHOLOGY OF THE SALIVA.

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(Continued from p. 742.)

β. *Excited Salivation.*—Increased flow of saliva from the use of general or local sialagogues. As before observed, the saliva obtained under these circumstances, is depraved, either from an alteration in its constituents, or from the presence of foreign matters.

Amongst the sialagogues which act through the system generally, mercury has been long and deservedly held in the highest repute, and its effects upon the salivary glands and their secretion have repeatedly been made the subject of minute observation and inquiry. Boerhaave is of opinion, that the saliva in mercurial ptyalism is totally changed both in its composition and properties. "Neque debet pro saliva haberi liquamen fœtidum, efficacia mercurii in morbis venereis expressum. Ea enim non saliva est, sed putridum liquamen, quod canes et alia animalia necasse visum est." (Prælect. 139.) Platerus evidently believes it to be much contaminated. "Verum et saliva putris et maligna, in lue venerea, ex hydrargyri usu reddita, dentes inquinat et denigrat, simulque ut vacillent efficit." (Prapers., p. 802.) Grainger says of it—"Sputum hoc tempore pleno rivo manans, a saliva, odore, colore, sapore, valde differt, acidis mineralibus vero, ut quidam scribunt, ne vel minimum tumultum ciens unquam vidi." (De Modo Excit. Ptyalism. ext. in Haller Disp., tom. i., p. 517.)

In the "Annals of Philosophy," vol. vi., p. 397, is detailed a minute analysis of the saliva of mercurial ptyalism. Its author says, "Saliva (mercurial) when first emitted, is an opal liquid, which speedily lets fall a white matter, and then becomes transparent. The white matter thus deposited, possesses the characters of coagulated albumen. As mercury is known to act very powerfully as a precipitate of albumen, I thought it possible that in the present case it might have been thrown down by the mercury, with which the system was known to be loaded. But I did not succeed in detecting the presence of any of that metal. The specific gravity of the saliva at 60° was 1.0038. It was a ropy liquid, and could be drawn out into fine threads; yet it could not be employed to paste together pieces of paper, not having the properties of a cement. This liquid was not altered by prussiate of potass, nor infusion of nut-galls. With nitrate of lead it deposited a copious white coagulum. It precipitated likewise with nitrate of mercury: 1050 grains of it being evaporated to dryness, left a residue of 7.5 grains. This residue was composed of coagulated albumen, 2.70; mucus, with a little albumen, 3.85; common salt, 0.95 = 7.50."

To Dr. Bostock we are indebted for the following very interesting examination of the saliva of mercurial ptyalism:—"An opportunity having occurred of examining the state of the saliva while the system was under the influence of violent mercurial action, it appeared desirable to ascertain how far the secretion was altered in its chemical properties. The quantity of fluid discharged was about two quarts in the day, and all the other effects of the medicine, both local and constitutional, were proportionally severe.

The saliva was of a light-brown colour, and had a faint odour; although slightly opake, it was nearly homogeneous; by standing for twenty-four hours, some small films and minute flakes subsided from it, by which its opacity was diminished; in this state it was then made the subject of experiment. It was considerably adhesive, but only in a slight degree tenacious; it was easily transferred from one vessel to another, in the form of drops, and when added to water, immediately diffused itself through the fluid, and was completely incorporated with and apparently dissolved by it. It did not indicate either acid or alkaline properties by the appropriate tests. By slow evaporation, until the residuum had acquired a de-

gree of brittleness, and a brownish-yellow colour, the quantity of solid contents appeared to be about one-fiftieth of the weight of the whole fluid.

By being exposed for some time to the heat of boiling water, a degree of coagulation was produced; the fluid became considerably more opake and thicker in its consistence, but there was no precipitate or separation of any of the solid matter. It was submitted to the following tests:—solution of corrosive muriate of mercury produced a considerable precipitate, and when the mixture was subjected to the heat of boiling water, a number of dense flakes separated from it, leaving the fluid transparent; after being passed through a filter, it had the aspect of pure water. By the addition of muriatic acid, the opacity of the saliva was considerably increased, and by applying heat, a coagulum was formed, which gradually subsided, but it was less firm, and the separation less complete, than when corrosive muriate of mercury had been employed.

From these experiments, we learn that the chemical constitution of the saliva was considerably different from its natural state, and that this difference consisted in its containing a quantity of animal matter, possessing properties similar to those of albumen in its uncoagulated state, or as it exists in the serum of the blood.

Having ascertained this change in the nature of the animal matter in the saliva, which, it may be presumed, was owing to the action of mercury upon the system, it became an interesting object of inquiry to ascertain whether any mercury could be detected in it. The method which I employed for this purpose was to treat the evaporated residuum with nitric acid, by which means, any mercury, if present, would be converted into the nitrate, and to test the fluid by the proto-muriate of tin. A preliminary experiment was made in order to learn how small a proportion of mercury might be detected by this process. A given quantity of mercury was converted into the nitrate; I took as much of this nitrate as contained one grain of mercury: this was successively diffused through different proportions of water, until it at length composed no more than one ten-thousandth of the mixture, when I found that the proto-muriate of tin produced a grey cloud, which was very distinctly visible. The same process was adopted with respect to the evaporated residuum of the saliva, but it did not afford the least indication of the presence of mercury: the experiment was repeated more than once without effect; and I may remark that I obtained the same results in some experiments of a similar kind, which were performed several years ago.

After an interval of sixteen days, I procured from the same individual a second portion of saliva, the use of mercury had, in the mean time, been omitted; and although the quantity of fluid discharged was still considerable, it was much less than before. The sensible qualities of the fluid were now entirely changed: it was considerably opake, and had a number of mucilaginous flakes floating in it, which were insoluble in water, and not easily miscible with it; it was so viscid as to be capable of being drawn into threads, while, on the contrary, it did not admit of being dropped. Its solid contents, as ascertained by careful evaporation, were found to be considerably more in quantity than in the former case; it slightly reddened litmus paper, indicating the presence of an uncombined acid.

When this saliva was submitted to the temperature of boiling water it was rendered more opake, but no proper coagulation took place: after standing for forty-eight hours there was a separation of a rude, dense substance from the remainder of the fluid, but in an imperfect degree only. The corrosive muriate of mercury and muriatic acid were respectively added to portions of the saliva; in each case the fluid was rendered more opake, but no distinct coagulation was produced, and although the effect was increased by applying heat, still the separation was not complete. By the addition of the sub-acetate of lead, a very copious precipitate was thrown down, consisting partly of large flakes, while the fluid was left quite transparent, and, as it appeared, deprived of the animal impregnation. This saliva was examined, as the former had been, for the purpose of discovering whether it contained any mercury, and it is scarcely necessary to state that the search was unsuccessful.

The improved state of medicine, with respect to the administration of mercury, seldom affords us an opportunity of observing so violent an operation of the medicine as took place in the above case; but I found the same changes, although in a less degree, in the saliva of persons under the moderate influence of this medicine. In a specimen which I procured from the wards of Guy's Hospital, the saliva had nearly lost its tenacity, was readily soluble in water, and after being passed through a filter was precipitated by corrosive muriate of mercury, and was rendered partially opake by heat. In another specimen the same effects were observable, but here the fluid retained a degree of tenacity, and was only in part capable of being passed through a filter; while a third specimen appeared to be little changed from its healthy state, except in its containing a greater proportion of water.

The conclusions which we may draw from the above experiments, on the nature of the saliva discharged while the system is affected by the action of mercury, are sufficiently remarkable to arrest our attention. We learn from them, in the first place, that no portion of the mercury is actually present in the fluid; from which it follows that the

effect of this medicine, although so remarkably manifested upon the salivary glands, must be produced through the medium of the system generally, and hence we may presume that all the organs destined for the secretion of mucus will undergo the same change. This change would appear to consist essentially in the conversion of the animal matter from the state of a mucous to that of a serous, or rather of an albuminous fluid. (Med. Chir. Trans. Lond., vol. xiii., pp. 73, 87.)

Devergie, by employing a process which he considers delicate enough to detect a 122,680th part of corrosive sublimate in blood, failed to discover the presence of mercury in the saliva of persons suffering from mercurial ptyalism. (Nouvelle Bibliothèque Médicale, 1828, 4, 17 and 18.) Buchner, on the contrary, in an examination of two pounds of saliva, professes to have obtained from it by destructive distillation a 200th of a grain of mercury. (Christison on Poisons, 3rd ed., p. 367.)*

As far as my own experience is concerned, and I have operated largely and with much patience, I can offer no evidence in favour of the presence of mercury in the saliva of people suffering from mercurial ptyalism. I do not deny the possibility of its presence, but I have never been able to detect it; and from certain observations which it has occurred to me to make concerning the amount of mercury absorbed into the system, I am inclined to the opinion that in none of its fluids will there be much probability of our recognising this metal. I have employed all the most eligible and delicate processes recommended by Christison, especially the galvanic test and destructive distillation, but in not one instance have I been successful. I need not enter into the minutiæ of the examinations, but may simply make the following statement of the conditions of the ptyalism and the proportions of fluid used.

Experiment 1.—Twelve ounces of saliva, obtained in one day, from a man who had been salivated for three days, with a drachm of blue pill.

Experiment 2.—Fifteen ounces of saliva, obtained in one day, from the same patient.

Experiment 3.—Twenty ounces of saliva, obtained in two days, from a woman who had been salivated during that time with a scruple of calomel.

Experiment 4.—Twenty-three ounces of saliva, obtained in two days and a half, from the same patient.

Experiment 5.—Thirty ounces of saliva, obtained in two days and a half, from a man who had suffered three days' salivation from fifty grains of blue pill.

Experiment 6.—Thirty-six ounces of saliva, obtained in three days, from a man who had been salivated during that time by the inunction of an ounce of mercurial ointment.

Experiment 7.—Twenty-four ounces of saliva, obtained in two days, from the same patient.

Experiment 8.—Thirty-one ounces of saliva, obtained in four days, from a patient who had been salivated during that time with two scruples of blue pill and twelve grains of calomel.

Experiment 9.—Forty ounces of saliva, obtained in a week, from a man who had suffered salivation during that time from twenty-five grains of calomel.

Experiment 10.—Forty-six ounces of saliva, obtained in eleven days, from a man who had been salivated during that time by the inunction of an ounce and a half of mercurial ointment.

Experiment 11.—Six ounces of saliva, obtained in a day and a half, from a dog that had been salivated with half an ounce of calomel, administered in four separate doses.

Experiment 12.—Eight ounces of saliva, obtained in two days, from a dog that was salivated during that time by an ounce of calomel, administered in four separate doses.

The salivary glands of these animals I examined with much care after death, but my search for mercury was as unsuccessful in them as in their secretion.

The deviations from a healthy state which chiefly characterise the saliva of mercurial ptyalism, consist in a variableness of specific gravity, and in an excess or a diminution of sulphocyanogen, mucus, albumen, and ptyaline.

When the process of mercurialisation is slow, the saliva is generally somewhat increased in specific gravity prior to the occurrence of actual ptyalism. This augmentation of density is owing to an excess of albumen, rarely of mucus, and is the first indication of the action of mercury upon the salivary glands. It is the antecedent both of fœtor of the breath and sponginess of the gums. If the salivation occur very suddenly, this change, characteristic of the slower operation of mercury, is not observable. The greatest specific gravity which I have met with in the saliva of commencing ptyalism has been 1.059. But in one case, wherein violent salivation occurred in six hours after taking five grains of calomel, the saliva at first was only 1.0048.

Generally, in a few hours after the salivary discharge has fairly commenced, the specific gravity of the secretion will decline, and continue very low until the action of the glands begins to diminish. Dr. Golding

* Nuck also speaks of having found mercury in the saliva,—"Hujus itaque salivam de particulis mercurialibus participantem examini nostro subjeci." (Sialographia, p. 44.) See also Dieterich (Die Merkurialkrankheit, 1837), and Colson (Arch. Gén. xii. 68).

Bird has met with it down to 1.0042 (Lond. Med. Gazette, July 2, 1841, No. 41, p. 756), and Dr. Thompson at 1.0038 (Annals of Philosophy, vol. vi., p. 397). It is often much less than this, and when freed from shreds of mucus which may casually trouble it, is almost as limpid and fluid as water. I have met with it as low as 1.0015. As a rule, I have observed that the saliva of mercurial ptyalism is of much less specific gravity than healthy saliva, but in several instances I have found it heightened through the entire course of the salivation. As the action of the glands decreases, the saliva, if previously thinner than usual, begins to thicken, and often contains an excess of fatty matter. This, however, is not invariable, for I have occasionally remarked that the secretion has continued transparent, and of trifling density, during the time that its quantity was undergoing a diminution.

The proportion of sulphocyanide of potassium is very variable in mercurial saliva. I have met with specimens in which no trace of this salt existed, and, on the contrary, I have found it in unusual abundance. In one example the proportion equalled .3 per cent.* In the majority of cases I have observed an increase of sulphocyanogen as compared with the amount in the healthy secretion.

The quantity of mucus is also often unnaturally increased in the saliva of mercurial ptyalism: frequently it is adventitious, and derived from the mucous membrane of the mouth, which becomes detached, and is then partially dissolved in the secretion. The specific gravity of the fluid is thus considerably heightened, and its transparency disturbed. The epithelium is at first suspended like nebulæ in the mass of fluid, but if left at rest, it gradually subsides as a greyish jelly-like sediment, and leaves the supernatant liquid comparatively clear. At other times the *proper* mucus of the saliva is unusually abundant, but the intermixture so perfect, that notwithstanding the increased amount of animal matter there is no observable turbidity. The secretion is inordinately viscid, does not drop from the mouth of a bottle, but runs in a stream (*en masse*), and is not easily miscible with water. It does not froth more than common when agitated, nor does boiling furnish any extra coagulation. I have once or twice, under these circumstances, remarked the entire absence of albumen. The following is an analysis of saliva which contained a greater amount of proper mucus than I have remarked in any other example:—

Water	988.7
Ptyaline	1.9
Fatty acid	.4
Albumen with soda, and albuminate of soda	.6
Mucus, with a trace of ptyaline	3.8
Lactates, Phosphates, Muriates, Hydrosulphocyanates (Potash, Soda, Lime)	2.4
Loss	2.2
	1000.0

In this instance, it will be seen the proportion of albumen is very trifling.

The saliva of mercurial ptyalism often contains an excess of albumen. I have observed it in many cases, though it is far from being universal. I am inclined to believe that the matter which Drs. Thompson and Bostock regarded as coagulated albumen, was chiefly mucus and epithelium. The saliva of mercurial ptyalism which I have found to contain more than usual of albumen, in addition to its strongly indicating the presence of the latter on the application of the ordinary tests, has presented a few other peculiarities of distinction from the secretion in its healthy state.

It is generally more alkaline than common, and thoroughly transparent. (In one or two examples, the fluid was turbid from the presence of mucus and epithelium.) It froths exceedingly when agitated, and the frothiness scarcely disappears by rest. The proportion of sulphocyanogen is often augmented, but the ptyaline is more frequently increased. The proper mucus is almost invariably diminished. The secretion absorbs oxygen with rapidity, and is easy of decomposition. It seldom deposits any sediment until after the commencement of decay.

In the saliva of persons who are under the influence of mercury, there is generally an excess of ptyaline. This happens whether sulphocyanogen, mucus, or albumen predominate or be deficient; but it is commonly attendant upon an increase of albumen or of mucus. There is sometimes, also, an extra amount of fatty acid. It is to the ptyaline that mercurial saliva is indebted for the sharp, penetrating taste and smell for which it is remarkable. If the salivation be carried to an excess, and the secretion become puriform, this pungent odour is lost, and little or no ptyaline can be recognised in the fluid. If the ptyaline be very abundant, the saliva is unusually prone to decomposition, in undergoing which, it generally evolves an ex-

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* The other ingredients were, in 1000 parts,

Water	989.8
Ptyaline	1.7
Fatty acid	a trace
Albumen with soda, and albuminate of soda	1.5
Mucus with ptyaline	2.1
Lactates, Muriates, Phosphates (Potash, soda, and lime)	1.6

The deficiency, it will be perceived, is chiefly with the other saline constituents of the saliva.

cess of ammonia. The greatest amount of ptyaline I have ever met with in saliva, was in a specimen, of which the following is an analysis :—

Water		987.4
Ptyaline		2.7
Fatty acid		.7
Albumen with soda, and albuminate of soda		1.3
Mucus with ptyaline		3.5
Lactates, Muriates, Hydrosulphocyanates, Phosphates	Potash, Soda, Lime	2.6
Loss		1.8
		1000.0

The saliva of mercurial ptyalism is almost constantly alkaline. If, in acute diseases, as fevers, inflammations, &c., the saliva be acid, as is very often the case, and mercury be administered, one of the first indications of its action, or of the patient's recovery, is the return of the saliva to a state of alkalinity. This is a symptom which I have long been in the habit of closely watching, and I have rarely found it a faithless monitor.

The exceptions to alkalinity in mercurial saliva are chiefly to be found amongst persons of scrofulous or scorbutic habit, or in instances wherein salivation is carried very far. Often in such cases the saliva, which has long been abundantly alkaline, will become strongly acid from the depraved action of the glands consequent upon the protracted use of mercury. If the latter be discontinued, the saliva will soon return to a healthier state—often, indeed, before the swelling and inflammation of the glands have subsided.

In long-continued salivation the secretion is apt to become very offensive, not less so to the patient than to those who are near him. In some instances the saliva is thoroughly filthy, having lost entirely its characteristic odour and properties. It is generally of a dark brown or fawn colour, sometimes intermixed with blood. When first discharged, the saliva is of various shades of opacity, from mucus and epithelium which float throughout it; these are gradually deposited as a bulky sediment, and the supernatant liquid becomes clear, and of a brownish or reddish hue. The secretion seldom contains any ptyaline, and is often also deficient in sulphocyanogen. It readily decomposes, and then becomes additionally offensive, and very ammoniacal. Its odour appears to depend upon a fatty matter which is separable by ether, and by distillation. This saliva bears little resemblance to the natural secretion, except in being furnished by its glands. It exerts no digestive action upon starch, and is very liable to produce nausea or vomiting, if swallowed.

In other cases, the saliva of mercurial ptyalism has been found to contain genuine pus. It is not always offensive under such circumstances, and is generally alkaline. It is, however, apt to degenerate, when the globules lose their rotundity, and a sensible acidity prevails. *

Iodine and its salts occasionally act as remote sialagogues. The fact has been denied by Carro (quoted by Bayle in his Bibliothèque de Thérapeutique, tom. i., p. 50), but other authors have abundantly confirmed it. In one of Dr. Manson's cases, the tincture of iodine produced soreness of the mouth and considerable salivation. (Researches on Iodine, p. 61.) "M. Lugol's formula seemed to have had this effect in a remarkable degree; one patient in particular suffered from profuse ptyalism." (Cogswell's Essay on Iodine, 1837, p. 43-4.) Other cases have been recorded by Mr. Winslow (Lond. Med. Gazette, 1836, p. 401,) and Dr. Ely (Ibid., p. 480). Dr. Mackall, of Maryland, administered eight drops of the tincture of iodine thrice daily for enlarged spleen; and after the twelfth or fifteenth dose the mouth became sore, and active ptyalism followed, with mercurial fœtor, &c. (Med. Chir. Rev., Jan. 1836.) Dr. Cogswell observed "a dropping of the saliva" in a dog to which he had repeatedly given iodine. (Op. cit., p. 44.) In Dr. Miguel's case of iodism, there was frequent spitting, "amounting to salivation." (Med. Chir. Rev., 2, 1825.) But I believe when the symptoms of iodism are fully manifested, there is usually a diminished secretion of saliva. The hydriodate of potass is also productive of ptyalism. It has been particularly observed by Dr. Clendinning (Lond. Med. Gazette, vol. xv., p. 869,) and Dr. Wallace (Lancet for 1835-6, vol. ii., p. 8). I have repeatedly seen a distinct salivation from the use of hydriodate of potass, but in no case have I noticed any mercurial fœtor, sponginess of the gums, or loosening of the teeth. In several instances

* Maunsell and Evanson deny that infants are capable of being mercurialised. "Mercury does not seem capable of salivating an infant. We have never seen it do so, nor do we know of any such case upon record. Our experience agrees with that of Dr. J. Clarke, as we have never succeeded in salivating a child under three years of age." (On Diseases of Children, p. 108.) I have seen two melancholy instances of salivation in children under two years of age. In both cases there was a profuse flow of saliva which was very offensive, and so acrid as to excoriate the parts over which it trickled. Finally, the gums and cheeks sloughed away, and the sufferers died, one on the fourth and the other on the sixth day from the commencement of the salivation. One of them had taken three grains of calomel in three separate doses, and the other had taken a scruple of mercury with chalk in four separate doses.

there has been no alteration in the vascular condition of the mucous membrane of the mouth, or of the salivary glands; but I have occasionally observed the latter organs to be tumid and tender. There has generally, also, been an increased lachrymal and nasal secretion.

The saliva of salivation from iodine and its compounds, is often unusually abundant in mucus or albumen. Indeed, an excess of one of these principles constitutes the chief deviation of the fluid from the healthy state. It is either thick and mucilaginous-looking, or frothy, and with difficulty spit out. Sometimes it contains an adventitious fatty matter; its specific gravity is commonly increased, but I have not observed any conspicuous deficiency of sulphocyanogen or ptyaline.

Iodine is often detectable in the saliva of persons who are taking it. Cantu (Journal de Chimie Médicale, 2, 291,) and O'Shaughnessy (Lancet for 1830-31, vol. i., p. 613,) have discovered it. Drs. Coindet and Gairdner were equally successful. Its presence is generally accompanied by a saline or a bitter taste. Joerg has particularly remarked it. (Journ. de Prog. de Sc. Med., 1830, 2, 13.) It has also been mentioned by Dr. Thompson as occurring in a few hours after taking the medicine.* I have often known patients, under a course of iodine, complain of a saline or bitter taste when nothing unusual was detectable in the saliva; but whenever iodine has been recognisable in the salivary secretion, they have always alluded to its unpleasant flavour. It is generally, also, attended by a sense of weight at the root of the tongue, aching of the jaws, and singing in the ears. In one case which occurred to my notice, the patient, a young gentleman, about twenty-one years of age, was slightly salivated on the fifth day, after having taken a scruple of hydriodate of potass daily. The saliva contained a notable proportion of iodine, but not any could be recognised in the urine. On the eighth day a violent diuresis supervened, and the salivary secretion was rather diminished. The latter was then found to be entirely free from iodine, whilst it was discovered to be abundant in the urine. On the tenth day the renal fluid was quite natural, and the saliva contained the same proportion of iodine as before. †

In a case mentioned to me, by my friend Dr. Young, of Edinburgh, an active ptyalism was caused by ten grains of hydriodate of potass administered daily for a week. Iodine was readily detected in the saliva; but a sudden and powerful diaphoresis occurring, the salival secretion was proportionably lessened, and not a trace of iodine could be discovered in it; the urine was also free, but the perspired matter contained it abundantly.

I inserted a seton in the neck of a dog, and then commenced giving him two scruples of hydriodate of potass daily, in six separate doses. During the space of a week, iodine was constantly detected in the matter of suppuration, but none was discoverable in the saliva, nor was this secretion more abundant than usual. At the end of nine days I removed the seton, but continued the administration of the hydriodate of potass. In two days afterwards there was a slight manifestation of ptyalism, and iodine was easily recognised in the saliva.

Other halogenous elements, chlorine, bromine, &c., and some of their compounds, act as remote sialagogues. The continued use of chlorine water is said to have caused salivation. (Pereira, Elements of Materia Medica, vol. i., p. 109.)* Dr. Glover produced ptyalism in dogs and rabbits by the administration of single poisonous doses of bromine. (Ed. Med. and Sur. Journ. for July, 1842.)

Digitalis sometimes induces salivation. A case is recorded in which the salivary discharge continued for three weeks. (Rust's Magazin., 25, 578.) See also Shroek (quoted by Wibmer, Wirk. d. Arzneim. u. Gift., bd. 2, s. 311); Withering (Account of the Foxglove, 1785, p. 184); Christison (Treatise on Poisons, p. 793); Pereira (Mat. Med., p. 841); Barton (Beck's Med. Jurisp.); Ed. Med. and Sur. Journ., vol. vii., p. 149; and Lond. Med. Gazette, Aug. 6, 1841, p. 739.

The injection of a watery solution of hemlock into the veins of a horse has been known to produce salivation. (Moiroud, Pharm. Vét., 359.) I have seen a case of ptyalism in the human subject from the protracted use of hemlock. Belladonna sometimes affects the salivary glands. (Obs. relat. to the Use of Belladonna, 1818, p. 9.)

In cases of poisoning by arsenic, salivation has often been remarked as a prominent

* Med. Soc. of London; Provincial Med. and Surg. Journal, vol. iii., p. 530.

† I once remarked a somewhat similar occurrence in the person of a gentleman who was taking the balsam of copaiba. For several days it had imparted the usual smell to his urine, but one morning he observed that the odour was absent, and he then felt an unpleasant taste and moisture in his mouth. The latter increased almost to salivation, and he brought me a quantity of the fluid for analysis. It had distinctly the odour of copaiba, of which it furnished a notable quantity by being carefully dried and exhausted with alcohol. He took none of the balsam during the time that the spitting continued, and his urine had a perfectly natural odour. In two or three days the saliva returned to its accustomed proportion and character.

* See also Wallace's "Researches respecting the Medical Powers of Chlorine," 1822.

symptom. (Marcus, Ephemerid, 1809; Ferriar, Med. Hist. and Reflect., 3, 306.) Mr. Furley has recorded five instances of it. (Lond. Med. Gazette, 16.) Trousseau and Pidoux have observed it to follow the continued use of small doses of arsenic. (Traité de Thérap., 2, 148; Johnson, Med. Chir. Rev., Jan., 1836.)

Opium sometimes salivates. (Journal der Praktischen Heilkunde, ix., 2, 201, quoted by Christison, Op. cit., p. 380; Paris, Pharmacologia; Dr. Watson, Lond. Med. Gazette, Aug. 6, 1841, p. 739.)

The salts of antimony, and especially emetic tartar, and James's powder, are apt to affect the salivary glands. Magendie has produced salivation in dogs by emetic tartar. (De l'Influence de l'Émetique.) Drs. Griffiths and Jackson have observed the same effect in the human subject. (Pereira, Op. cit., p. 414.) I have seen an active ptyalism that continued for a week, consequent upon the use of James's powder.

The salts of lead occasionally produce the same effect. In poisoning by lead, the saliva is generally of a bluish colour; Laidlaw (Lond. Med. Repos., N. S., 6, 292); Thomson (Therapeutics, vol. ii., p. 64); Christison (Op. cit., p. 514).

The terchloride of gold often exerts a marked influence upon the salivary secretion. (Chrestien, Sur. un Nouv. Remède dans le Trait. des Mal. Vén., Paris, 1811.) Grötzner says it does not, like the mercurial preparations, affect the teeth and gums. (Rust's Mag., B. 21.) Neil affirms that the "pulvis auri" salivates. (Rech. et Obs. sur les Effets des Prép. d'Or., Paris, 1821.) Some obstetricians are of opinion that friction of the gums with any gold substance facilitates dentition, and increases the salivary discharge.

Prussic acid has been known to occasion salivation. Drs. Macleod and Granville have seen not only ptyalism, but ulceration of the mouth produced by the continued use of prussic acid. (Lond. Med. and Phys. Journ., vol. xlvi., pp. 359 and 363.)

Nitric acid has repeatedly given rise to similar effects; and alkalies, both carbonated and caustic, have been known to act powerfully upon the salivary glands.

In poisoning by nux vomica, a profuse ptyalism has been observed (Lond. Med. Repos., 19, 448); and also in poisoning by cantharides. (Pereira, Op. cit., pp. 1369 and 1371.)

I have before said (p. 814) that the internal use of sulphur generally increases the amount of sulphocyanogen in the saliva. I have several times known the salivary secretion itself augmented by this medicine. In one instance sulphuretted hydrogen was liberated on the addition of an acid to the saliva. In THE LANCET for 1841-2, vol. i., p. 518, is the case of a woman who, after exposure to the vapour of sulphur, "complained every day that she spat nasty spittle. She said the stuff she spat tasted like brimstone."

The local sialagogues are those which act immediately upon the salivary glands by being chewed. They are a numerous class, but in the materia medica chiefly comprise the vegetables which abound in essential oil. Any substance, however, which is capable of imparting a local stimulus to the salivary glands may be regarded as a sialagogue. They almost invariably increase the alkalinity of the saliva, and sometimes also the sulphocyanogen and albumen. They generally communicate to the saliva their taste, smell, and properties.

(To be continued.)

ON THE USE OF THE

MIDWIFERY FORCEPS

IN CASES OF

PRETERNATURAL LABOUR.

CATECHU IN SORE NIPPLES.

To the Editor of THE LANCET.

SIR,—Although, as a general rule, I am opposed to the system of anonymous correspondence, yet as your correspondent "J. F. C." appears not to be actuated by any motives but a desire to gain information on an important point of practice, and writes in the spirit of fairness which becomes a member of our honourable profession, and as he may have some good private reasons for wishing to preserve an incognito, I have pleasure in bringing forward any information which may serve to elucidate the subject.

From the tenor of my last letter, it was evident what my opinions were on the subject of the application of the forceps under the circumstances mentioned, and I adduced reasons for my opinions. It appears, however, to be desired that I should endeavour to lay down some rules by which our practice may be guided more precisely, and by means of which we may act on something like sure grounds. I wish the subject had been taken up by some one more capable of doing it justice, but as no one else volunteered, and as without my stepping forward there was every appearance of its falling to the ground, so I will not leave it till I have done all in my power to aid in its elucidation. I shall, therefore, with your permission, enter on the subject systematically, and do my best to solve the problems proposed. Let us not lose sight of the real question under discussion: it is not whether the forceps should be applied for the purpose of effecting the delivery of a dead child, because that I grant would be objectionable practice, if we knew the child to be already dead; but whether the forceps are applicable, and

would be judiciously applied to save the life of a child, or to attempt to save it under the circumstances of the head being the last instead of the first part born; and whether the use of the forceps may be ever so far extended as to be properly and judiciously applied after the cessation of pulsation in the funis, or the supervention of other ordinary signs of the death of the fœtus. If the use of the forceps is ever justifiable in preternatural cases of labour, it will then be proper to lay down rules by which we may be enabled to distinguish those cases in which their use is indicated, and those in which contra-indicated; and if they are an instrument to be employed for the purpose of making an effort to save the child's life when the more general signs of life are absent, we must also endeavour to lay down some laws by which our practice in these cases may be guided. That these are questions of the greatest importance I agree with "J. F. C.," and I shall endeavour to discuss them candidly.

First. I contend that the forceps are applicable, and may be advantageously applied in many cases where the head is not the presenting part. They may be used in footling cases, breech cases, and such as are rendered footling by turning. The circumstances under which their use may be required are, 1, on account of mal-position; 2, want of space, produced either by rigidity, deformity, or one or both hands being by the side of the head; and 3, some adventitious cause, as hæmorrhage.

First, as regards mal-position of the head at the brim of the pelvis. We are called to a case of labour, find the body born, and the head retained at the brim of the pelvis, merely because it has either been allowed spontaneously to get fixed there, with its long axis corresponding to the short axis of the pelvis; or because, which is much more likely, when Nature would have done her work well, some officious midwife or unpractised person has ignorantly prevented its properly adapting itself to it. The uterus is contracting tolerably firmly on the head, and we may twist the neck and destroy the child without altering its improper position. Now, this is a decidedly proper case for the use of the forceps. Ten to one if they are dexterously applied; the head may be easily moved into a proper position, and delivery effected in the usual manner without any further instrumental aid. Though I believe this to be not an uncommon case, I cannot now call to mind more than one in which the fact appeared to me clearly demonstrated. It was the case of a poor woman, a patient, if I mistake not, of the Northern Dispensary, in the New-road. There was no deformity of the pelvis, but its short axis corresponded with the long axis of the child's head, nor could I rectify the position. Great force was required to bring the head through the brim, and the loss of the child's life ensued. I have no doubt that with a proper use of the forceps the child's life might have been saved, and the delivery effected with comparative ease. Mal-position of the head, as a cause of difficulty, is more frequently met with at the outlet, but it is much more easily remedied. Yet we must all recollect cases in which we have experienced much difficulty, and I feel strongly persuaded that I can recollect cases where the child's life has been lost for want of a proper application of the forceps. It is in these cases that the application of the forceps is especially easy, nor have I found their application much more difficult than in any of the ordinary head cases.

The cause of mal-position at the outlet is not unfrequently that the midwife or unskilful practitioner hastens to complete the delivery too rapidly after the shoulders are expelled; the consequence is, that instead of the head gradually altering its position, it becomes fixed with the face to one acetabulum. We can generally manage this case perfectly easily with our hands alone; but if not, and we shall not always be able, if we exercise due regard for the life of the child, the forceps should be passed carefully along each side of the head, and the position rectified. The delivery may be at once completed or not, according to circumstances. But when the face of the child is situated towards the pubes of the mother, and so locked at the outlet, our chances of success will be diminished; and although we may in many cases succeed with the forceps, we shall occasionally have to perforate, and I believe success will not follow so often as might be supposed.

Secondly. Want of space. 1. From rigidity, the most frequent cause of the death of the child in footling cases. The treatment I have found most efficacious in these cases is to bleed largely. By this treatment we shall save many lives, but we shall save more if we add to this the use of the forceps, mainly for the purpose of compressing the head. I have failed in saving the child by these means; we shall all fail occasionally, but I am fully persuaded that in theory there is no sufficient reason to be assigned against their use, and in practice they will be found eminently useful. 2. From deformity. Dr. Denman, in his excellent introduction to the "Practice of Midwifery," relates an interesting and remarkable footling case that he attended, in which the promontory of the sacrum projected considerably. Great power of traction was required and exerted, and the child's head was at last brought through, but its parietal bone was permanently, or, at least, for a considerable time, depressed, and its life saved. How many other children similarly situated would be saved? I apprehend very few. I think many more might be by a more judicious practice. I

have at this moment in my mind recollections of two cases in which I believe the children perished, when, with a proper use of the forceps, they might have been saved. It must be borne in mind that at the time of the occurrence of these cases I was opposed to the use of the forceps, I adhered to established rules. It is only lately that I have seen the advantage of their use, consequently I am more able to refer to cases unsuccessful through want of them, than to cases rendered successful by means of them; but later cases have proved to me the practicability and advantage of applying them in such cases as are unsuccessful without their aid. I have known from slight deformity of the brim of the pelvis strong and long-continued traction necessary to bring the head through, such as we can hardly suppose not to occasion some fear of untoward consequences to the mother. Is it not, then, easy to see the advantages resulting from a cautious compression of the head? That the application of the forceps under these circumstances is more difficult, cannot be denied, nor would I recommend their application by any but skilful hands; but I cannot think that, with proper care, there can be more danger resulting to the mother from their use, than from the great amount of traction necessarily used sometimes, and even with safety to the life of the child. Another case of deformity in which they may be applied is straightness of the sacrum, and so is narrowness of the pelvic arch. 3. One or both arms may have been allowed to come down so low with the head, that they are not able to be disengaged. It has not been my lot to meet with a case rendered difficult through this circumstance. I have always in my own practice disengaged them easily enough, and I have not been summoned by others to cases of difficulty produced by this cause. Still I have no hesitation in recommending the same practice in such a case, and I have been informed of such. And, lastly, in the event of hæmorrhage rendering speedy delivery necessary. Should the head be so situated as to require long tractive force to be exerted to deliver it, or perforation to be performed as an alternative, surely it is our bounden duty, unless evident circumstances should forbid their use, to attempt to save the child's life, while we deliver quickly by a cautious use of the forceps. It is but a short time since I had a case of this kind. Hæmorrhage was going on, and I did not feel quite sure that I should be able to deliver the head quickly enough, especially if the hæmorrhage increased. I sent for a pair of forceps, and had I found it necessary I should certainly have used them.

Having given an outline of the cases in which I consider the use of the forceps advisable under the circumstances of a presentation of the lower extremities, I find myself called on to state something about the instruments used. I have used the forceps of Dr. Davis, and I think that they will be found the instruments most generally applicable in these cases. Where, however, the head is retained at the brim, or high in the pelvis, the long forceps will require to be used, and I prefer them with a double curve. As regards the application of them, a flannel should be applied round the legs and body of the child, and they should be given to an assistant, who should be directed gently to second our traction. The body being held in a convenient position, we pass the two forefingers of the right hand along the neck of the child to the head; we already know where the ears are situated, and pass with our left hand one of the blades along one side of the face and head; the same proceeding is repeated with regard to the other blade, and compression and traction are exerted in the usual manner, aided by our assistant. Why is it that the use of the forceps has been so strongly forbidden in those cases in which I have now been advocating their use? We all know and feel the justice of that maxim which stands pre-eminent in British midwifery, that the life of the mother is in all cases to be considered of paramount importance, and may we never see the time when this eminently just, religious, and politic maxim, shall be disregarded. As in all other matters, however, men may become bigotted and blinded to matters of importance, and this has been the case here. Anxious to carry out this doctrine to its fullest extent, they have carried it too far; they have allowed it to extend unduly to the injury of the interests of the child. It has twice occurred to me to know the heads of children to be perforated with a common bistoury in cases in which there was, I firmly believe, no occasion for instrumental aid at all, certainly not for more than the forceps, and this was done for the purpose of preventing any danger accruing to the mother. So strongly fixed was the above doctrine in the mind of the practitioner, that the sacrifice of a child's life was considered of most trifling importance when there appeared even a chance of danger happening to the mother. I would not for one moment have it supposed that I considered the lives of the mother and child of equal importance, but I would impress the fact strongly that the life of an as yet even unborn child is not to be unnecessarily thrown away. And how much more strongly must this practice apply in Popish countries where still echoes the decision, "Non enim licet unum interficere alterius vitæ gratiâ?"

Our second point for consideration is, the propriety of applying the forceps for the purpose of endeavouring to save the child's life, after the cessation of pulsation in the funis. This consideration extends to two classes of cases; those we have been discussing already, in which the head is the last part born, and those cases in which the funis prolapses

the presentation being in other respects natural. Before proceeding further, let me just state, that I do not consider sharpness of the bones, as felt through the scalp, alone, a sufficient indication of the death of the child. This opinion is grounded on practical experience, having been once completely deceived after giving a rather decided prognosis. I mention this because it was referred to last week. I presume it will be granted by all practical obstetricians, that if we have a reasonable hope of the child's life, and the case is in other respects proper for the forceps, we may fairly give them a trial. The argument then resolves itself into this, whether cessation of pulsation in the funis is positively a sign of the death of the child, or so far a sign of the death of the child as to forbid the use of the forceps? I think not. I have already adduced a case so decisive on this subject, that on this case alone I should be satisfied to rest this point of practice. That the child's life may continue after circumstances which might be considered sufficient to destroy it, there can be no doubt. I have known an instance of a child being born alive after the head has been perforated, and part of the brain discharged. Several such cases have been recorded. We must all recollect a remarkable case in France of a child surviving amputation of both arms at the shoulders in order to accomplish the delivery, it being supposed to be dead. I was informed by a medical friend of a case in which a child was nearly destroyed by the compression produced on the cord by the usual ligature after the birth, but that the compression being removed after some time, the child was restored. It has been asserted by a celebrated French obstetrician, that after the circulation is arrested through the arteries of the cord, it is continued for some time feebly through the veins; if so, it appears to offer something like an approach at an explanation. We all have read a recorded case of a child being put aside in a basket in a cupboard as dead, and that after some time a noise being heard, the nurse thought the cat had been shut in, and went to let it out, but found the child kicking about. The fact of the resuscitation of puppies is too well known to dwell on it. Still the most satisfactory evidence appears to me to be contained in the case I recorded last week. Reference has been made to some advice given by Dr. Rigby on the subject of presentation of the funis, with regard to turning, ergot of rye, and the forceps. I will briefly relate the following case:—Mrs. S., in labour with her third child. I was sent for early in the morning, and found the funis presenting before the head, which was coming down into the pelvis; os uteri tolerably well dilated; membranes not long broken; no apparent deformity of pelvis. I made up my mind that if I could turn with tolerable ease, this would be the best mode of delivering.

I passed my hand carefully into the uterus and got hold of one foot, but could not possibly reach the other; and I moreover found it impossible to bring that one down without the employment of considerable force. The question now was, whether I should forcibly bring down the foot, at a certain risk to the mother, or whether I was to regard her interests so implicitly as to take the chance of saving the child by other means. I thought I had no right in such a case as this to allow any risk to be run by the mother, especially as I could only give the child the chance which would accompany a footling case. I, therefore, withdrew my hand, and when the head had descended lower, gave two doses of ergot of rye. The head was large, and there was some difficulty in its passage through the pelvis, and by the time it had advanced within reach of the vectis, pulsation in the funis had ceased. I, however, applied that instrument, and delivered as quickly as possible. The time, however, that elaped was too long (probably a quarter of an hour), and I had not the satisfaction of saving the child. I believe, however, the result would have been different had I used a pair of forceps. To me the application of the forceps, for the rapid delivery after the cessation of pulsation in the funis, appears in many respects analogous to the performance of the Cæsarian section for the purpose of saving the child's life after the death of the mother; but the chances of success in the former case appear to me to be greater, probably from the physiological cause mentioned above.

And now with regard to the length of the interval after the cessation of pulsation during which I should consider it proper to make an effort to save the life of the child with the forceps. This is a question to which I cannot venture to reply categorically. I have not made observations on a sufficient number of cases to enable me to lay down anything like a positive rule on the subject. I have seen children born dead after the funis has ceased to beat only one minute, but I have seen them live after a much longer interval. I should not like to give a child up for dead if pulsation had only ceased during five or ten minutes. This, however, shall be made a matter of observation by me in future cases, and the results of my investigations shall be duly recorded. I may also probably add some observations on the best modes of resuscitating apparently dead infants.

I take this opportunity of stating that I have lately tried the *tincture of catechu* in cases of *sore nipples*, as recommended by Mr. Farr in THE LANCET, on some of the patients of the charity, of which I have superintendence, and I have reason to be satisfied with the results. I cannot say that any of the cases were very severe. They were chiefly that form in which we find large

superficial excoriations denuding the nipple, and spreading for some distance round it. I applied it by means of lint dipped in the tincture, and kept constantly to the part. I shall try it in severer cases, and shall be happy to forward the results. I am, Sir, yours, &c. W. E. HUMBLE,

Brunswick-terrace, Islington,
Sept. 1, 1842.

ANIMAL HEAT.

To the Editor of THE LANCET.

SIR,—Professor Liebig has, in his "Animal Chemistry," expounded a theory of the evolution of animal heat by intra-combustion, which has erroneously been considered as original. The same theory will be found stated, insisted on, and applied to practical purposes in the cure of disease, by any one who may think it worth while to refer to my "Treatise on Pyrosis." It is but bare justice to add, that I derived this theory from Dr. Collier, whose class I formerly attended. The subject of intra-combustion was his favourite hobby, and generally, as his other pupils must recollect, was the signal of an extra hour's lecture from that gentleman.

It is Dr. Collier's own fault (if modesty be a fault) that this public acknowledgment was not given to him in my work above cited. I am, &c. T. WEST.

Coventry, Sept. 3, 1842.

*** A note on the subject by Dr. Collier appears in THE LANCET, Aug. 20.—ED. L.

FORTY-SIXTH REPORT
OF THE
FRIENDS' RETREAT, NEAR YORK.

THE following report on the Retreat Asylum for the Insane by the able resident surgeon, Mr. Thurnam, is so interesting, that we print it for the information of our readers:

As will appear from a comparison of the subjoined statement with the reports of previous years, the number of patients, eighteen, admitted into the Retreat during the past year, has not differed materially from the average of the past twenty years; although, as was the case during the two previous years likewise, the number brought under care has been larger than during a few preceding years; when, in consequence of the additions to the buildings, at that time in progress, numerous applications for admission were refused.

Of the whole number admitted during the year, six were unconnected with the Society of Friends; and of this class fourteen remain in the institution at the present time.

The number discharged recovered during the year, 3, has been remarkably small; and this can only, in some degree, be explained by the unfavourable character of the cases admitted; but must be partly attributed to the greater proportion discharged recovered during the preceding year, and partly to the larger number of convalescent patients at the present time in the house. The ages of those who recovered were as follows:—

	Males.	Fem.	Total.
From 40 to 50 years....	1	0	1
„ 50 to 60 „	0	2	2
Total.....	1	2	3

The general health of the inmates of the institution during the year has, with little exception, been good; but the number of deaths, 7, has, notwithstanding, been above the average; and gives a mean mortality of about 8 (7.94) per cent. the average population of the year. The mean annual mortality, however, of the Retreat, for the entire period of its operation from 1796, does not exceed 4.78 per cent. No conclusions can, indeed, be safely drawn from the results of the experience of a single year, in an institution like the Retreat, or even in one of much larger size; and it is hence interesting to point out that the higher rate of mortality for the past year, scarcely compensates for the smaller proportion of deaths during the two preceding years, in which they only amounted to five; and thus, when the three years are taken together, the mean annual mortality is found to be less than that for the whole period, and only 4.53 per cent.

Two of the patients who died were labouring under fatal diseases at the time of admission, which soon afterwards proved fatal; and the others were, with one exception, cases of chronic visceral disease, which had affected the subjects of them for more or less considerable periods. The ages of those who died were as follows:—

	Males.	Fem.	Total.
From 40 to 50 years....	1	2	3
„ 50 to 60 „	1	0	1
„ 60 to 70 „	1	2	3
Total	3	4	7

The average age was 55 years.

The admissions, discharges, and deaths for the forty-six years which the institution has now been in operation, are shown in Table A; and in Table B, these are arranged in four classes, according to the duration of the disorder at the time of admission. The results, as deduced from this tabular statement, satisfactorily prove that the probability of recovery is much greater in the more recent than in the older cases. It will be seen, from Table C, that the proportion of recoveries, during the entire period, in cases of all descriptions, has been 50 (49.65) per cent.; or one of every two cases admitted; the expectation of recovery being as one to one. But, "of cases in Class 1, admitted within three months of the first attack, 80 per cent. within a fraction (79.) have been discharged recovered. The expectation of re-

covery in such cases is, therefore, as four to one. Of cases in Class 2, of the first attack, and of three to twelve months' duration when admitted, 45.65 per cent. recovered. Of cases in Class 3, not of the first attack, and of less than twelve months' duration when admitted, and which consequently embraced many recent cases of recurrent insanity, as many as 61.30 per cent. recovered. In Class 4, embracing cases whether of the first, or of subsequent attacks, of more than twelve months' duration, the proportion of recoveries was not more than 18.94 per cent.; the expectation of recovery in such cases being less than one in five. Recovery, however, is not only more frequent, but is also effected in a period which is shorter in proportion to the recency of the attack.....That appropriate moral and medical treatment are, to a very great extent, more available in the early stages of the disorder, and that, consequently, patients should be placed under proper care at an early period after the attack, are thus on all hands evident." It will be also seen, from the same table, that the mortality has been much higher among the recent than among the older cases.

The age of the patients is a circumstance which should always be attended to in any comparison of the results obtained in different asylums. A table is subjoined, which shows the ages of those who have been admitted at the time of the first attack, as well as upon admission, with the average numbers resident at the several decennial periods of life during the year.

After the information, as to the internal economy and general management of the institution, which was given in the Statistical Report, printed and circulated last year, it would be superfluous to enter upon these subjects upon the present occasion; more especially as the experience of another year has not led to any material modification or change in the practice pursued at the Retreat, as there detailed. It may, however, be here stated, that detailed "instructions to the attendants, as to the performance of their duties," were, with the concurrence of the committee, drawn up by the officers of the institution, early in the present year; and it is trusted that, by this measure, greater assiduity and uniformity of practice will be secured to the patients.

In accordance with the plan pursued in previous years, a table has been prepared with the view of showing the numbers which have been more or less employed, as well as the modes of employment, during the year. The proportion, it will be seen, is almost the same as in preceding years; and the advantage which has accrued to such of the men as have been occupied in the open air, has been quite as decided; both as regards the improvement in the general health, and in some cases as promoting the more complete restoration of the convalescent. The proportion of men who are thus employed, though less than in many of the larger asylums, is perhaps nearly as large as could be expected, when the previous habits and circumstances of many of the patients at the Retreat (and particularly the greater average age to which the patients attain in our establishment), are considered. The average age of the fourteen men who were not at all employed was 50½ years; and as many as six of this number were 64 years of age and upwards.

It must, however, be stated in this place, that the table under consideration does not exhibit the actual amount of labour performed by each patient; which, indeed, could hardly have been shown in the compass of a single table.

TABLE A, showing the Admissions, Discharges, and Deaths, for the Forty-six Years, 1796—1842.

	Males.	Females.	Total.
Admitted during the forty-six years.....	304	346	650
Discharged,—			
Recovered	129	176	305
Improved	45	25	70
Unimproved...	16	18	34
Died	75	75	150
Total discharged during the forty-six years.....	265	294	559
Remaining Midsummer 1842.....	39	52	91
Average numbers resident during the forty-six years	28.92	39.21	68.13

TABLE B,

Showing the Numbers of Cases Admitted, Discharged, and Remaining, with the Mean Numbers Resident, during the Forty-six Years from the Opening of the Institution (1796—1842); arranged in Classes, according to the Duration of Disorder upon Admission.

Duration of Disorder when admitted.	Admitted.		Discharged.										Remaining Midsummer 1842.		Mean Numbers annually Resident.	
			Recovered.		Improved.		Not improved.		Died.		Total.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
First Class.—Cases of the first attack, of not more than three months' duration	47	53	37	42	2	2	1	0	6	6	46	50	1	3	1.52	2.13
	100		79		4		1		12		96		4		3.65	
Second Class.—Cases of the first attack, of more than three, but of not more than twelve months' duration	48	44	23	19	11	1	1	1	8	13	43	34	5	10	3.08	8.17
	92		42		12		2		21		77		15		11.25	
Third Class.—Cases not of the first attack, and of not more than twelve months' duration	98	132	54	87	15	13	2	6	17	16	88	122	10	10	5.01	6.77
	230		141		28		8		33		210		20		11.78	
Fourth Class.—Cases of the first or not first attack, and of more than twelve months' duration	111	117	15	28	17	9	12	11	44	40	88	88	23	29	19.31	22.14
	228		43		26		23		84		176		52		41.45	
Total	304	346	129	176	45	25	16	18	75	75	265	294	39	52	28.92	39.21
	650		305		70		34		150		559		91		68.13	
Of the Society of Friends or connected with it	268	308	120	166	37	21	8	10	68	69	233	266	35	42	26.87	36.11
	576		286		58		18		137		499		77		62.98	

TABLE C, showing the Average Proportion of Recoveries and the Mean Mortality, in Cases of Recent and Longer Duration when Admitted. Deduced from the preceding Table.

Duration of Disorder when Admitted.	Average Recoveries per cent. of the Admissions.			Mean Annual Mortality per cent. Resident.		
	Male.	Female.	Mean.	Male.	Female.	Mean.
First Class.—First attack, and within three months	78.7	79.2	79.	8.6	6.1	7.1
Second Class.—First attack, above three, within twelve months	47.9	43.2	45.6	5.6	3.4	4.0
Third Class.—Not first attack, and within twelve months	55.1	66.0	61.3	7.4	5.1	6.1
Fourth Class.—First or not first attack, and more than twelve months	13.5	23.9	18.9	4.9	3.9	4.4
Average	42.4	50.9	46.9	5.6	4.1	4.8
Average, exclusive of those unconnected with the Society of Friends	44.8	53.9	49.6	5.2	3.9	4.5

It would be more correct to calculate the "recoveries per cent." on the numbers discharged.

The object of the table is to show the proportion of "recoveries" in 100 patients "treated" for the full term in the asylum. But it is evident that the "treatment" of the patients now in the asylum has not terminated; some of them will recover; they figure in the "admissions," and do not figure in the recoveries; it is evident, therefore, that the proportion of recoveries at the Retreat is slightly understated. We call Mr. Thurnam's attention to this point. The treatment of the patients discharged has terminated, and he will obtain a near approximation to the truth by employing the "discharges" instead of the "admissions" in his calculation.

CASES OF

CHOLERA IN WALES.

THE TREATMENT OF THAT DISEASE.

To the Editor of THE LANCET.

SIR,—Having noticed in the "Provincial Medical Journal" the report of a case of malignant cholera attended by Mr. West, of Poole, I beg to call your attention to the fact, that three cases of cholera have occurred in my neighbourhood, which is an agricultural district, on the borders of England, and remarkable for the general healthiness of its population.

CASE 1.—The first case, that of Mary Bowen, did not awaken suspicion as to its real nature, owing to the cessation of the symptoms in the first or diarrhœa stage. She took half-drachm doses of the chalk powder with opium.

The other two presented an assemblage of symptoms belonging only to Asiatic cholera.

CASE 2.—William Evans, a harvest labourer, after a severe day's work, during which he had indulged himself freely with ale, was attacked about midnight, August 18, with severe vomiting and purging, attended with violent cramps. Medical assistance was not procured until about ten o'clock the following morning; he then presented the following symptoms:—Countenance anxious and collapsed, of a dark colour; eyes sunken; skin cold; pulse feeble, and scarcely perceptible; complains of violent cramps in the lower extremities; has frequent vomiting and purging of a watery fluid, in which white shreds are floating, resembling pieces of washed flesh; thirst insatiable. To take immediately *tincture of opium*, gtts. xxv. To have cold water with a small quantity of milk added *ad libitum*, and

℞ *Comp. chalk powder with opium*, 3ss.
Make a powder. Send 4. Take one every second hour.

Four, p.m. Purging has ceased; skin warmer; cramp less violent; vomiting still continues.

℞ *Calomel*, gr. ij;
Opium, gr. ¼.
To be taken every second hour. Send 6.

19. Bowels have not been moved since last report; urine suppressed; vomiting continues occasionally. To have

℞ *Powdered rhubarb*, 3iss;
Carb. of magnesia, 3ij;
Aromatic confection, 3j;
Peppermint water, ℥vi.
Make a mixture. Take a quarter every fourth hour.

20. Bowels not moved; has passed no urine; vomiting still continues. Repeat the mixture; add 3j of jalap.

21. Convalescent.

Case 8.—Morris Lewis Pentre was attacked at night after a severe day's labour; he had taken a large quantity of small beer in the state of fermentation during the day, which was excessively hot.

19. Complete collapse; skin cold; countenance livid; voice feeble; tongue and breath exhaled from the lungs cold; purging copious, consisting of a clear fluid, containing white curdy flocculi suspended in it; has constant thirst; severe vomiting occasionally; cramps attacking various parts of the lower extremities so severe, as to cause him to change his position every minute. To take calomel, gr. ij; powered opium, gr. ½. Make into a pill. Take one every four hours.

℞ *Powdered rhubarb*, ʒj;
Carb. of magnesia, ʒij;
Aromatic confection, ʒj;
Peppermint water, ℥vj. Mix.

Make a mixture. Take a quarter part every four hours. Constant friction. To have cold water, or milk and water, *ad libitum*.

℞ *Nitrate of potash*, gr. xv;
Carbonate of soda, ʒss;
Tartaric acid, ℈j.

Make a powder, to be taken in cold water.

Four, p.m. Cramps less severe; diarrhœa moderated; tongue and breath a little warmer. To take

℞ *Calomel*, gr. xij;
Chalk powder with opium, ʒij;
Oil of peppermint, six drops.

Mix; make six powders.

20. Purging and vomiting have ceased; has passed no urine; skin warmer, but dry. Repeat the aperient mixture. Beef-tea. If the bowels are not moved in the course of six or eight hours, to have

℞ *Croton oil*, gr. j;
Jalap, gr. xxx;
Rhubarb, gr. xx. M.

Take half for a dose, and repeat in three hours if necessary.

Nine, p.m. Moderate reaction has taken place; skin dry; suppression of urine continues; bowels not moved. Omit the saline, and take

℞ *Calomel*, gr. vj;
Comp. ipecac. powder, gr. viij.

Mix, and divide into six powders.

21. Much worse; comatose appearance; breathing laborious; bowels not yet moved; has passed no urine; pulse weak and soft; voice nearly inaudible; skin warm, but dry. Mustard cataplasms; urtication.

Evening. Possesses perfect consciousness; when roused was able to give directions respecting his last will; secretions still suppressed; his hands are very tremulous; there is complete relaxation of the muscular system. His appearance is similar to that exhibited by persons in the last stages of tetanus, hydrophobia, and peritonitis, indicating complete prostration of the vital powers. To have a mixture of ammonia, nitrous æther, and camphor mixture.

22. Had a copious, fœtid, bilious evacuation this morning; in other respects the same.

23. Died this morning.

The indications of treatment pursued in these cases were simple, viz.:—

1. To check the immense serous flux from the mucous lining of the intestines.

2. To rectify that peculiar condition of the blood which caused both the flux and its consequences—the cramps and suppressed secretions.

3. To moderate reaction by keeping the bowels in a soluble state.

The first indication was fulfilled by means of the compound chalk powder with opium, the large doses of nitrate of potash in cold water, with the other saline remedies.

The second was attempted by the small doses of calomel, and by the diluents, while reaction was favoured by the severe vomiting, which gave an impulse to the action of the heart, and promoted the permeation of the collapsed capillaries; hence the vomiting was unchecked, and had the stage of collapse continued, mustard emetics would have been freely given.

Saline purgatives were carefully avoided during reaction, but the bowels were not acted on until a very considerable quantity of aperient medicine had been taken. I would beg to call your attention to the efficacy of the nitrate of potash, which is strongly recommended by Dr. Gooch in sanguineous hæmorrhage, and which the writer has found on one occasion effectual in arresting a most alarming intestinal hæmorrhage in a case of typhus fever.

This salt, also, by increasing the coagulability and vitality of the blood, would powerfully tend to remove the whole formidable train of consecutive symptoms. The treatment by saline injections will probably supersede every other in the course of fresh invasions of this epidemic, when physiologists and chemists shall have determined the true proportion of saline ingredients with careful experiments on the quantity of albumen requisite, in order to effect the transmission of the circulating fluid through the most delicate vessels of the system.

In the above cases it appears that both the opium in moderate doses and the salines were beneficial. What, then, was the effect of the calomel? I am free to confess that I consider it as a very doubtful remedy. Is it required to promote the secretion of bile? The gall-bladder is invariably loaded with dark-coloured bile. Is it given to allay the irritability of the stomach? The vomiting is an effort of nature, and should be encouraged; draining away no part of the vital fluid, its tendency is to promote reaction.

The calomel, then, by its depressin g fluence on the system, is, notwithstanding its numerous and talented advocates, at least a doubtful, in many hands certainly a dangerous, remedy in this disease.

Brandy was not given, a remedy which true science will shortly sweep away from our catalogue of remedies for this dangerous disease, in which, if no good can be done, we should administer remedies so potent for good or for evil with a cautious and forbearing hand. I am, Sir, your humble servant,

T. EDWARDS.

Llansaintffrais, Montgomeryshire,
Sept. 3, 1842.

CHOLERA IN LONDON.
TREATMENT IN FIFTY CASES.

THE CRAMP.

To the Editor of THE LANCET.

SIR,—In reference to the numerical method, it is much to be regretted that your able advocacy of so valuable a principle has not stimulated many labourers in the field of medical science, who are enjoying ample opportunities to store the treasures they may have harvested, amid the vast materials gleaned by your invaluable Journal.

During the prevalence of any epidemic this duty becomes more imperative, as only by such means can uniformity of treatment or opinion be evidenced, and by no other can the effect of remedies and the result, &c., be definitively determined. I consider such details are of more real value, when derived from the variable resources presented to the general practitioner, than when obtained through the medium of charitable institutions; all classes of society being prescribed for by the former, whilst only the unfortunate tribe of paupers are supposed to frequent the latter, encumbered by the many additional ills that poverty is heir to.

The fervent months of July and August have occasioned cholera in this district to an unusual extent, assuming in many instances an alarming character, from the violent spasmodic constriction or cramp that pervaded the muscular system, in addition to the intestinal agony and depressing sickness and diarrhœa that were constant. Of fifty cases that I have noted, varying in intensity according to age, constitution, *the immediate cause*, and the length of duration from the onset of the attack, not one has terminated unfavourably; and of these fifty the medical treatment has been precisely similar, regardless of age and constitutional peculiarities, and in no instance has it failed to afford almost an immediate check to the symptoms.

The hot bath for the extremities, increasing the temperature for fifteen or twenty minutes, and hot fomentations to the abdomen and chest when cramp was agonising, invariably quieted the nervous irritation and muscular spasm, and the following mixture was never deviated from in the slightest degree, and alone corrected the noxious cause:—

℞ *Prepared chalk;*
Acacia powder, aa, ℥j;
White sugar, ℥ij;
Compound tincture of rhubarb;
Compound spirit of ammonia, aa, ℥ij;
Peppermint water, ℥iiiss. Mix.

Make a mixture.

From a third to a sixth part was repeated at intervals of from one to four hours, according to the urgency of the symptoms. One dose, if retained by the stomach, instantly afforded relief, and in an hour after its administration a small cup of arrow-root, or bread and milk, could be taken with comfort. On the following day beef-tea with rice, toast and coffee, or a small portion of brandy in arrow-root, seemed to assist the recovery, which afterwards only required innocent light diet to regain the wonted vigour.

I believe the disease solely to consist of an acid state of the secretions throughout the whole length of the intestinal canal, thereby producing nervous or spinal irritation, corresponding with the virulence of the cause, and that the neutralisation of this morbid secretion and slight stimulisation of the vital energy produces an immediate cure. The severe cases were almost, without an exception, attributable to the use of vinegar on the previous day, combined with salmon, oysters, cucumber, or pickle; and this *immediate cause* was so general, that I conclude the disorder alone originates from an acid state of the gastric and intestinal secretions, especially as the curative means fully demonstrate this position. Some patients had taken fruit, dressed and undressed, but many had not partaken of anything to be assigned as an irritant, and none required remedies after the third day, as the annexed table will satisfactorily attest. I have no doubt many other practitioners have adopted a similar practice, but as this does not appear in your wide-flowing channel of information, I am induced to waft my little cargo upon the stream, with a hope it may induce others to seek the same useful harbour:—

	Cases.	CURED. First Day.	Second Day.	Third Day.
Men	13	9	3	1
Women.....	22	17	4	1
Boys } under	7 }			
Girls } 12 yrs	8 }	15	7	5	3
Total.....	50	33	12	5

In a communication from Mr. French (LANCET, Sept. 3,) it seems to be his decided opinion that nature has wisely instituted the spasm or cramp to enable the muscles to circulate the vital fluid, which might otherwise become congested, inferring from this

hypothesis that a less degree of alarm may be reasonably entertained by the practitioner at their presence, and contrasting this morbid effect with the healthy muscular effort commonly practised during venesection. He also observes, in reference to their origin, "cramps in cholera generally occur when the system has been suddenly deprived of a large quantity of fluid, and in all cases they will be found associated with a very feeble condition of the circulation."

In the first place, it seems contrary to nature and experience, to suppose that the extreme exhaustion induced by the spasm has any such vital intent, or that it is more than a consequence of severe nervous or spinal irritation, its intensity corresponding with the extent of surface under a morbid influence, and the members or organs affected. Thus, if the *lower* intestines are especially disordered, we find the feet, legs, and thighs primarily cramped; and should the stomach and *higher* intestines become similarly involved, the muscles of the chest, neck, and arms will, through the reflex nervous impetus, speedily follow in the train. A fairer comparison may be adduced between the cramp of cholera and the severe muscular spasm of epilepsy; and the lividity of surface would present another striking analogy, as well as the frequent occasion of the latter by intestinal irritation from worms, or some accumulation morbidly exciting the spinal system, to this peculiar display of muscular constriction.

Another remarkable feature is, that in both instances the spasm is induced and much aggravated by the horizontal position, the paroxysms in epilepsy generally occurring whilst lying down, and in cholera attended with cramp in the extremities, it is almost impossible to deviate from the semi-erect posture; no pressure of the feet upon the ground is required to ward off the attack or aid the circulation; or is there, in reality, any arrest in the vertical current: whilst in the more easy recumbent attitude cramp very speedily returns, so long as the spinal system is under the specific irritation. Because blood would not readily flow if a vein was opened, does not prove it to be either void of fluidity or in a morbid condition, but it distinctly attests the loss of that nervous control which regulates the vitality of the circulating mass and the structures through which it is impelled, solely originating, as is evident in innumerable cases of epilepsy, from cerebral or spinal irritation of a temporary character, and not from any morbid or tar-like condition of the vital fluid.

With regard to the danger in such cases, I believe the symptom of cramp to prove an extreme degree of nervous or spinal irritation; and as to its occurrence from the sudden loss of fluid, there is no evidence to substantiate that assertion, for it not only frequently occurs as an early symptom, but in two-thirds of the cases here recorded no cramp in the limbs was manifested, although in very many the relaxation was more frequent, and the entire system more depressed than in those affected with general cramp.

I am, Sir, yours, &c.

CHARLES RAY, Surgeon.

Elizabeth-street, Eaton-square,
Sept. 5, 1842.

THE LAW OF THE LAND REGARDING SURGERY.

THE FUTURE POSITION OF SURGEONS WHO ARE NOT MEMBERS OF THE COLLEGE.

To the Editor of THE LANCET.

SIR,—In THE LANCET for August 13th, there is a paper containing a defence of the practice of surgery by licentiates of the Apothecaries' Company, which is not too calmly and temperately conducted, but certainly with too little consideration of the great basis on which the practice of surgery by licentiates of the hall is founded, namely, *the law of the land*. Any man who states publicly that a licentiate of the hall is unqualified to practise surgery, or who by a similar statement maligns him privately, is liable to an action for damages. If the laws of the land relative to the medical profession be in any, or in many, points faulty; if, instead of their keeping pace with the improved state of medical science—surgery inclusive—they have varied to suit the interests of corporate bodies, rather than of science and of the public, who is to blame, and who is to suffer? Certainly not he who, acting up to existing laws, obtains such legal qualifications as he *must* attain, and as are exacted from him by law, and, as to every optional and extra-legal qualification, does as he pleases. The Legislature, as advised by the then Mr., now Lord, Brougham, refused to the Royal College of Surgeons the power it sought, of prosecuting persons, being not members of that college, for practising surgery. It is true that persons not members can have an action at law brought against them for malpractice, and exactly so can members of the college. The law of the land knows no distinction between them. The law of the land being such, and having been such for a long term of years, many persons, in strict accordance with it, have deemed it needless to pay twenty-two guineas for a diploma, to which, as regards the private practitioner, no legal privileges were annexed. The point on which I now insist is one strictly of law, not of virtual but legal fitness. The question of virtual fitness has been ably handled by your correspondent, though he has left unsaid much that might

be said. The subject as viewed in all its bearings, both virtual and legal, is, now that changes are being meditated, one of special importance.

To adhere at present to the point of law, I would broadly state it thus, as respects the practice of surgery. A man shall choose not to be a member of the college, either from a spirit of dissent, or from true or false economy, or from want of means, or from any other motive, or on the spur of any necessity for otherwise employing his money, or from whim, or led or misled by the eloquence of the leading papers of your Periodical, or even from conscious ignorance and incapacity; and he shall choose to style himself Surgeon, and to practise surgery; and against any man who seeks publicly or privately to injure him by pronouncing him an unqualified surgeon, he can bring an action at law for damages. Even supposing all such practitioners to be wholly ignorant and incapable—such is the law, and has been for a long term of years. But none, excepting those whose self-interest leads them to promulgate such an opinion, and those whom they succeed in influencing by it, advance any such supposition. On the contrary, all licentiates of the hall must almost inevitably have been both witnessing and studying and practising surgery through the whole period of a five years' term of apprenticeship; many during a longer or shorter subsequent period as assistants, and also necessarily, concomitantly with anatomy, at the hospitals. I cannot imagine such a human lusus naturæ, as a man studying anatomy without studying surgery also: in some courses of lectures the two subjects are proceeded with, *pari passu*; in none are they, or can they, be wholly disjoined.

There is a great need for alterations in the laws affecting the medical profession; and even, could no other mode of effecting such alterations be found, if the support of a hitherto legally unlicensed corporate body should be for the good of the public and the benefit of science, let that support be given it. Before such a consideration all men, all things, should be made to yield. But supposing, irretrospective of the past, contemptuous of laws hitherto existing, on the faith of which a mass of respectable, well educated, and intelligent medical practitioners have acted, a law were to be passed incapacitating all licentiates of the hall who were not also members of the Royal College of Surgeons from acting as surgeons, what indecent results would ensue? Against such results it was that the Legislature, at the reincorporation of the College of Surgeons, guarded; not men of considerable professional education, such as are all licentiates of the hall, but men practising as surgeons with no regular education whatever, but who, by whatever means they acquired the knowledge they might have obtained, possessed the confidence of the public, and must have been deemed by Lord Brougham,—who dictated to the Legislature the refusal of power to the College of Surgeons to put them down,—to be deserving of such confidence. No laws in favour of any corporate body of men should be passed which cannot be most clearly proved to be also in themselves beneficial: nor should these be of an invidiously retrospective operation upon the fortunes and characters of long-established professional men,—men in whose skill nobles place their confidence, trusted by the middle classes, respected and beloved by the poor, authorised by law, and of known and acknowledged skill and ability among their professional brethren,—are not to be wantonly, by one stroke of legislation, thrown out of any portion of their practice. The public—the Legislature—duly apprised of the state of the case, will not permit it. How would it be regarded by members of the legal profession, were a new mode of examination to be enjoined by law on candidates, which should give them the preference over solicitors of twenty years' standing, who may have had under their hands half the title-deeds in the county where they have practised, and which would throw such established solicitors into disrepute, or out of practice, or any portion of their practice? Such an act of injustice would not be thought of even in a dream. Would it be less so for a young medical practitioner to be enabled by law to elbow out of place a man old enough to be his father, and experienced enough to be his teacher, and to rob him by legalised calumny of his hard-earned and well-earned reputation? It must not be placed out of consideration that, in the mean while, such a law, favouring a corporate monopoly, would be protection (among other members of the college) of those members who, prior to the reincorporation of the College of Surgeons, acted as surgeons in virtue of their apprenticeship and education; and of the fact of their being then in practice as such, and who were admitted as members of the Royal College of Surgeons simply on expressing their wish to be so, and paying two guineas. Of passing acts, retrospectively injurious to individuals, both the Legislature and public bodies have hitherto been ever duly careful. Whatever course may be imperatively enjoined on future medical students in order to qualify themselves,—to call up to London from their quiet homes, where they have long been domiciled, under the protective shadow of the law, established practitioners, for the purpose of being examined by men, many of them their juniors in age, some of them their inferiors in ability,—as to their professional acquirements, with the alternative of being compelled to abandon part of their practice, would be a most unheard-of and barbarous action. Such an action I should not deem possible, being without precedent, were it

not for the recent edicts issued forth by those men placed by the laws above all law, the new poor-law commissioners. These edicts have suddenly thrown out of one attainable portion of professional practice, that of attendance on the poor, a large body of well-educated, intelligent, hard-working men, who have at length found the law of the land itself an insecure place of footing. These men, though they have broken no law, though there is no law with which they have failed to comply, thus find the law of the land itself fail beneath their feet. They find this, and they submit to injury and insult tamely; and there are reasons why they so submit.

No man of sense and education has lived long in the world without acquiring a contempt for nine-tenths of all that is merely conventional, which contempt experience increases daily. Step by step, however, in company with this feeling of contempt, proceeds onwards his sense of the commercial and social value of the conventional. Hence arises the spectacle of conduct and convictions wholly at variance. He walks through the world, a man in a mask. He too often submits to, or avails himself of, all that is mean and petty for the sake of self-advancement. He finds himself in situations in which he must do both or sink, crushed beneath the wheels of fate.

The slight resistance made on the part of licentiates of the hall to the tyranny of the new edicts of the poor-law commissioners, exemplifies the charge of undue submission. Individually, too many of them maintain a craven quietness under the infliction, as a course of conduct dictated to them by policy. Edicts, which supersede the laws of the land, are passed by with scarcely a comment on their illegality. The victims of them have, indeed, many surrounding perils and hardships to contend with. Among other motives which render licentiates of the hall quiet, is the dread of being represented as incompetent persons to practise in their profession at all. In the midst of the cut-throat competition which prevails in this as well as in most professions and trades, every man makes the best of himself. The public mind requires to be disabused of the grossest misapprehensions, which are indirectly presented to their minds. The member of the Royal College of Surgeons has passed an examination, which was, in my time at least, as every one knew, a matter notoriously less dreaded than that at the hall, in surgery. With the exception of anatomy and surgery, he is examined at the college on no one professional subject. On anatomy, and every other direct or collateral subject connected with his profession, the candidate is examined at the hall. But the impression which some interested persons would be only too glad to convey, and which is pretty freely conveyed, amounts to something like this, and the public is in some measure gulled by it. If the member of the college does not say this himself, he gets or he has friends to say it for him. "How can you trust Mr. So and so, who is not a member of the college, with the care of your wife and children? Suppose, during the progress of the measles or small-pox, or pending your wife's confinement, a necessity for cutting off your wife's or child's leg should arise, what, oh! what, would be the consequence of employing him?" He may be sensible, from positive ocular testimony, perhaps, that the licentiate so maligned may be a better practical surgeon, as well as apothecary, than himself; but, nevertheless, he will tell you, that he thinks himself entitled to make the best use of his expended twenty-two guineas that he can; and such impressions as the above go forth. Alas! the poor licentiate! poor, perhaps, as a medical student; too poor, however, to have had twenty-two guineas to spare; but from this, the more sedulous, as circumstances often act inversely, in mastering the only one department of his profession in which he has not been examined. He finds himself situated among a nest of hornets. And what does he do? Oh! he knows that his testimonials as a licentiate are equivalent to a continental diploma as a doctor of medicine, and perhaps

He pays forty pounds, and becomes an M.D.,

as soon as he is rich enough to afford thus to bolster up testimonials which of themselves are good enough to need no such nonsensical addition. But by this addition he knows, too, that the public may be gulled. He acts upon the monastic adage, "Si populus vult decipi, decipiatur."

The least that can be done to avoid bringing contempt on the law itself, and to avoid retrospective injury to individuals who have complied with every existing statute of the law, is, in case of a change conferring added power on the Royal College of Surgeons, to leave its diploma open to all *now*, at least to all *long* established practitioners in surgery, upon payment of two guineas, as, be it remembered, was exacted at its reincorporation; or, what might satisfy better both the candidates and the public, the same fee, 2*l.* 2*s.*, coupled with an examination in surgery only, by a provincial junto of three or four of the elder surgeons in the neighbourhood. But to compel them to quit their practice, to come up to London to undergo the humiliation of a junior student's examination, and the expense in full of a diploma, would be a barbarous procedure.

As regards the public, the utmost concession that can be made to the member of the college is, that the licentiate of the hall, who *must* be somewhat acquainted with surgery without being well able to help himself, and who probably knows more about it than ever in mixed practice is required for him to put in requisition, may be but partially acquainted

with this branch of his profession. Against this concession may be set many facts proving the respectability of the acquirements of this class of practitioners, as evinced by their successful treatment of surgical cases, and the success of operations of great responsibility. Could it be done without violating the proprieties of life, I could adduce numerous instances of my assertion; the sum total of which would be the conclusion that they are not inferior, as surgical practitioners, to any other body of practitioners, however entitled. Some of these are tried and proved ornaments of their profession, whom it would be an injury to science and to the public to throw into the shade by new medical enactments. Even established surgeons, who had set up as such without any known and recognisable qualification whatever, were, some twenty-seven years since, spared this fate at the direct suggestion of Lord Brougham. How much more the respectable and well-educated class of practitioners whose claims I now vindicate! I am sensible I have vindicated them but feebly; but *non sum qualis eram*. I remain, Sir, your obedient servant,

AN OLD SUBSCRIBER AND CORRESPONDENT.

Sept. 1, 1842.

THE PARLIAMENTARY REPORT. THE COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—As there is now an interval, that will extend over some months, during which no legislative measures can be enacted towards medical reform, it becomes the duty of all the members of the profession to give the existing condition of things their most serious attention, and to endeavour to construct some plan which shall be a security to the public for competent medical aid, and at the same time shall be calculated to prevent the continuance of those intestine broils which have disturbed the profession for so many years. I wish that every candid and reflecting practitioner would carefully peruse the minutes of evidence taken before the select committee on medical education, as ordered to be printed August 13, 1834. There should be a copy of that report in every provincial town. The profession would from that learn what great obstacles there are to any honest reform. The quibbling prevarications, the absurd inferences, the puerile fallacies, the false allegations and distorted facts that are there on record, will, to future ages, when present prejudices have died away, appear in all their monstrous turpitude: it is, in fact, one of the greatest curiosities in modern medical literature. Yet here and there are to be found in it the evidences of a few who do not bow the knee to Baal.

This book will be of great use to the biographers of some of the eminents, for here they will find sayings and reasonings that throw great light upon character, and show how the moral and intellectual faculties had been accustomed to work on the subject of medical politics.

It will appear from the report that a corporation, as hitherto organised, is an incubus on freedom and industry,—working to the disgrace of the few, and to the injury of the many; and hardly less as regards the corporation of Pall-mall East, than as relates to the college in Lincoln's Inn-fields. The former is a monument of barbarism and treachery, which by its *by-laws* has wholly subverted the object for which it was instituted. Mr. Willcock, in reply to Question 4157, says, (and he has well studied the matter, and is a Chancery barrister,) that "the fellows are appointed to judge of the actual qualification, and not of any to be presumed, from the particular circumstances of education." Dr. Arnott states that the by-laws have been employed to act against the object for which they were allowed to be made; and that the college, by these morally, and, perhaps, legally unjust means, has "thrown nineteen-twentieths of the whole medical practice of the country." But the days of the college are gone. Think on what it might have been, and on what it is! Its best friends cannot now, in these thinking times, defend it. Repentance is too late. The poor, imbecile, paralysed body may vegetate for a few years, but all its animal powers are gone. It can act neither on the defensive or the offensive. How can any one now desire its licence, for which they charge upwards of 40*l*., exclusive of stamps, when a more valuable one may be obtained at one-fourth the cost at Apothecaries' Hall,—a licence that will enable a medical man to practise without let or hindrance by any power, in any part of England or Wales, in any and every department of the profession? Can any of the graduates of the University of London wish for such a licence as the College of Physicians may give? Surely not. Let all such first pass Apothecaries' Hall, and then the University of London, if they choose, asking themselves, "What can I gain, as regards authority to practise, from the College of Physicians? I am, Sir, your obedient servant,

HOMO.

London, Sept. 2, 1842.

THE COLLEGE OF PHYSICIANS.

ITS ORIGINAL OBJECTS, MODERN PROCEEDINGS, AND FUTURE CONDUCT.

To the Editor of THE LANCET.

SIR,—It is rumoured that the Royal College of Physicians in London is about to make some material alterations in its present system. The extremely exclusive nature of its plans has not tended to fill its coffers, or

to support that influence over the profession which the Legislature intended when its charter was granted.

It never could have been contemplated that the powers with which the College was invested at its creation should be employed for the purpose of making a little snug monopoly of an aristocratic character, or that the charter should merely have a view to the whims of the doctors, and not a more extensive operation in favour of the people. I am not in possession of a copy of the charter, but from what I can gather, and from what is reasonable and just, it seems to me that the corporation was instituted for the purpose of protecting the public against the evils arising from medicine being practised by incompetent persons, and that power was given to the College to grant testimonials of competence to all sufficiently qualified candidates, without any restrictions as to the peculiar mode in which they should pursue the practice of medicine. Yet we see that a vast majority of medical practitioners have been for ages, in this metropolis, and throughout the kingdom, pursuing the profession not only without any testimonials or licence from the College, but without being allowed to become candidates for the licence, excepting under such restrictions as would render them less able to meet the wants of the public by affording prompt and positive assistance as well as advice. Thus the College refuses to give to the public that information respecting the abilities of practitioners which the public has a right to expect from it. With the power to license they had, also, a power to restrain the unlicensed; but failing in one duty, it tried to keep up the power to punish. Now this was too bad to be allowed; the voice of the public, and the dictates of common sense and fair justice, protected the unlicensed practitioners, and gave encouragement to them. The College in vain attempted to enforce its restrictive law, and that institution is now, virtually, a MEDICAL CLUB, and nothing more. The apothecaries of the present time have more power than the College; the College has been fairly driven from the field, and is now a monument of the fatal results of pride and selfishness.

The apothecaries are *bonâ fide* physicians. Although not necessarily "Doctors of Medicine," yet to all intents and purposes they are physicians, that is, legally-authorised medical practitioners, and they can enforce their demands for medical attendance, independently of their charges for medicine supplied; and if any one of them wishes to practise under the appellation of "Doctor," there are universities that will recognise their just claims,—founded on education, previous apothecaries' licence, and practical experience,—to that distinction, and the whole College is thus set at defiance, its teeth are drawn, and its claws are cut, and it can only growl. There appears to be one experiment that it may perhaps try, whereby to catch some who have a respect for the *antiquity* of the institution, and a reverence for the great *names* with which it has been associated, and that is to grant testimonials without restriction of mode of practice (it has not the power to confer any authority beyond what every apothecary already possesses), and to lower its exorbitant fee.

By this plan it is reasonable to expect that many who possess aristocratic prejudices would apply for the licence. Restrictions might still rest on the fellows, if they like them, as they do on the council of the College of Surgeons, but the mass of the profession should be free to use their own discretion, whether or not they would supply their own medicines, or bleed a patient labouring under apoplexy; or even administer an enema, or secure a wounded artery. They should not be liable to fine or expulsion if they refused to let a patient wait for hours in agony for medicine, when they could immediately administer to his relief. How can men deserve the name of sons of Esculapius who refuse to do any appropriate thing for the relief of the afflicted besides writing a prescription? Is this either moral, dignified, humane, or decent? Reform *will* progress, and those who resist it will fall a sacrifice to their own obstinacy.

I hope to see the day when all that is barbarous will be swept from the profession of medicine as well as from all others, and that men will be content to stand upon their own individual merits, and not require the trickery and trumpery of meretricious decorations. The names of Bacon, Newton, Harvey, Sydenham, Haller, John Hunter, and others, outshine all the titular appendages that could be attached to them. No honour could be conferred on them that their merits would not eclipse. I am, Sir, your obedient servant,

ANGLUS.

London, Sept. 1, 1842.

PARISH VACCINATORS.

To the Editor of THE LANCET.

SIR,—You will oblige me by inserting in your excellent, and by wrong-doers most dreaded, Publication, the following instance of unprofessional conduct. The publication of such cases I believe to be the most effectual method of preventing their repetition. I am, Sir, your obedient servant,

SAM. RICHARDS.

39A, Bedford-square,
Sept. 6, 1842.

On the 26th of May I delivered Mrs. Goodall, of 36, Penton-street, Pentonville, for the second time; and on Saturday last, according to my usual and with my patients

well-understood custom, called to vaccinate the child. I was not a little astonished when the mother expressed her regret at the trouble I was put to, informing me, at the same time, that the child was already vaccinated. She then went on to explain that one day, a short time previously, a medical *gentleman*, perfectly strange to her, called, and all but insisted upon his vaccinating the child, informing her she would otherwise be liable to be severely *fined*, he being appointed to vaccinate *all* for that district. She objected to this, informing him she expected her "family doctor" calling daily to do it, as he had done the other. But eventually, owing to the absence of her husband, and the dread of the *fine* for non-compliance, she reluctantly assented. The child was vaccinated, and medicine sent and paid for. The husband expresses himself as very dissatisfied and angry with such interference, and taking advantage of his absence to alarm his wife into compliance.

I submit to the profession the propriety of a parish vaccinator going into the houses of respectable tradesmen, who are both able and willing to pay their own medical attendant, unsought and objected to, but accomplishing his purpose by the anything-but-professional means above detailed.

So long as such vaccinator confined his operations to the "back-slums and by-ways," hunting up and vaccinating the needy poor, for which purpose, in my humble opinion, his office was created, he would be acting meritoriously, and but fulfilling his proper duty.

PREPARATIONS OF IRON.

To the Editor of THE LANCET.

SIR,—I beg to forward you the following formulæ for the use of the general practitioner, being at once eligible and economical, requiring but little trouble in the preparation, and always to be depended upon, as to the proportion of the active ingredient in a given quantity of the liquid. I am, Sir, your very obedient servant,

JOHN TODD, M.D.,
King's College, Aberdeen.

Mare-street, Hackney,
Sept. 5, 1842.

LIQUOR FERRI POTASSIO-CITRATIS.

℞ *Acid. citric. crystallizat.*, ℥j. 3v;
Potassæ carbonatis, 3vij;
Ferri sesquioxydi, ℥j;
Sp. ammonia aromat., q. s.;
Aquæ distillat., ℥xxiv.

Dissolve the acid. citric. and potass. carbonat. in the water, when the effervescence has ceased, add the ferri sesquioxyd., and digest for twenty-four hours (frequently stirring) in a gentle heat; filter the liquid, and neutralise any excess of acid by dropping in, gradually, sp. ammon. arom., until it is saturated. The liquid is of a reddish-brown colour, not precipitated by alkalies, nor altered in colour by the ferrocyanide of potassium, or tincture of galls. The taste is slightly styptic, though not unpleasant. It will be seen that there are two equivalents of acid. citric. combined with one equivalent of potass. and one equivalent of the ferri sesquioxyd.:—*one drachm* of this solution contains *five grains* of the dry ferri potassio-citras.

An agreeable syrup may be made by dissolving sacchar. alb., lb. j in f℥viij of the solution, and liquefying by a gentle heat. We have thus f℥xviij of syrup; consequently f℥j will contain 2.25 grains.

SYRUPUS FERRI IODIDI.

℞ *Iodine*, grs. 362;
Ferri limatur., grs. 90;
Aquæ distillat., ℥viij;
Sacchar. alb., lb. j.

Digest the iodine and iron in the water until it become nearly colourless; pour off the clear liquid, and dissolve the sacchar. alb. with a gentle heat. When cold, pour off the clear syrup, and keep it in half-pint bottles well corked, and in the dark. The deoxydising agency of the sugar renders it unnecessary to keep a piece of iron wire in the bottle. As no precipitate takes place, except when exposed to a strong light, and air combined. In this, 362 grains of iodine combined with 80 grains of iron, forming 442 grains of ferri iodidi, dissolved in water ℥viij, which by the solution of the sacchar. alb., lb. j makes ℥xvilj, being three grains of ferri iodidi in f℥j of the syrup.

QUESTION OF WINDOW-TAX ON HOSPITALS.

THE FEVER HOSPITAL.

THE 48 Geo. 3, c. 55, imposes a duty on *dwelling-houses* for not more than six windows or lights, and for seven windows or lights, and exempts hospitals, except officers' and servants' apartments, which it declares should be assessed as entire *dwelling-houses;* the 6 Geo. 4, c. 7, s. 1, repeals the above duties. Held, that the duty on *dwelling-houses*, for not more than six and for seven windows being so taken away, it must be likewise deemed to be taken off the officers' and servants' apartments in hospitals, such apartments being, by the clause of the repealed Act, so treated and assessed as *dwelling-houses*.

Middlesex, Holborn Division.

At a meeting of the commissioners of assessed taxes, acting for the said division, holden at the board-room, No. 24, Red Lion-square, in the said division, the 3rd day of September, 1841, Mr. Hyde appealed

against an assessment made on him as secretary to the Fever Hospital, at Battle-bridge, in the said division, as follows:—(48 Geo. 3, c. 55, sch. (A), rule 8.)

EXEMPTIONS—CASE 2.

Name of Inhabitant.	Description.	Windows. No.	Duty. s. d.
Charles Hyde, secretary to the Fever Hospital, Battle-bridge.	Matron's apartments and Housemaids..... } as to 3rd.	4	7 0
	Medical officers....	4	7 0
	10*l.* per cent.....	..	1 4

The commissioners *relieved the premises from charge*, under case 2, exemptions, 48 Geo. 3, c. 55, schedule (A); but the surveyor being dissatisfied with such determination, requested us to state a case for the opinion of her Majesty's judges, which we state accordingly.

The 48 Geo. 3, c. 55, imposes duty on every dwelling-house according to the number of windows or lights in each dwelling-house, and the offices to be charged therewith, viz.:—

	£	s.	d.
Schedule (A.)—Not more than six windows or lights, except in such house which shall be worth the rent of 5*l.* by the year, and shall be charged to the duty mentioned in schedule (B), according to the rent.....	0	6	0
Not more than six windows or lights, if of the value before-mentioned, and charged to the said duty accordingly.....	0	8	0
Seven windows or lights	1	0	0
Eight windows	1	13	0

And so on.

By case 2 of exemption from window duty, any hospital, charity-school, or house provided for the reception and relief of poor persons, *except such apartments therein as are or may be occupied by the officers or servants thereof, which shall severally be assessed and be subject to the said duties as entire dwelling-houses.*

By the 6 Geo. 4, c. 7, s. 1, the duties imposed by 48 Geo. 3, as set forth in the schedule thereto annexed, marked (A), *for every dwelling-house*, with the offices therein described, containing not more than six windows or lights, &c., and for every dwelling-house containing not more than seven windows or lights, *are repealed.*

The Fever Hospital is a hospital provided for the reception and relief of poor persons, and supported by voluntary contributions.

The commissioners are of opinion, that previously to the passing of 6 Geo. 4, the apartments in question (containing only four windows each), would have been severally assessable as *entire* dwelling-houses, with the duty imposed by the said first-mentioned Act, on entire dwelling-houses with not more than six windows, 6s. 6d. or 8s., as the case might be, according to the rental of the premises in question (under schedule (B) of the said Act, which said schedule (B) was repealed by the 4 Will. 4, c. 19); but inasmuch as the Act imposing the window duty (48 Geo. 3, c. 55,) is repealed, *quoad* the duties on houses with less than seven windows, it follows that since the passing of 6 Geo. 4, c. 7, there exists no rule for charging the apartments in question, seeing that no rule existed for charging them except as entire dwelling-houses, and they therefore fall wholly within the exemption, case 2, before set forth. The exception to such exemption, operating under 48 Geo. 3, *as a rule for charging*, viz., as entire dwelling-houses, but which rule for charging is repealed by 6 Geo. 4, thus leaving the exemption entire as to hospitals, &c., provided for the reception and relief of poor persons, where the apartments occupied by the officers do not contain more than seven windows.

The surveyor, however, has charged the apartments in question, under rule 8 of 48 Geo. 3, c. 55, for charging windows or lights, viz.:—

"Every distinct chamber or apartment in any of the inns of court or of chancery, or in any college or hall, or in either of the Universities of Oxford or Cambridge, or any public hospital, being severally in the tenure or occupation of any person or persons, shall be subject to the same duties as if the same was an entire house, which duties shall be paid by the occupier thereof respectively; provided that every such chamber or apartment which shall not contain more than seven windows or lights, shall be charged at the rate of three shillings and sixpence for every such window or light," reduced by the 4 Geo. 4, c. 11, to one moiety.

The commissioners are of opinion, that this rule does not apply to a hospital for the reception and relief of poor persons; but to public hospitals, such as Greenwich and Chelsea Hospitals, the separate apartments in one of these latter establishments, having not more than seven windows, are still chargeable with a duty of 1s. 9d., one moiety of 3s. 6d. for each window, because this rule for charging public hospitals is not

touched by the 6 Geo. 4, c. 7; but with respect to apartments in hospitals, charity-schools, and houses provided for the reception and relief of poor persons, there does not exist, so far as the commissioners can discover, any rule for charging them.

The surveyor, in support of his charge, contends that the 8th rule of 48 Geo. 3, c. 55, is not affected by the exemption granted by the first section of the Act, 6 Geo. 4, c. 7, inasmuch as no reference is made therein to chambers or apartments mentioned in the said rule, but only to dwelling-houses, containing "not more than seven windows or lights," and which in his opinion was intended to give relief to poorer classes as occupiers thereof, and not to hospitals, charity-schools, or houses provided for the reception and relief of poor persons, the apartments occupied by the officers or servants thereof being expressly excepted in the second case of exemptions in the Act, 48 Geo. 3, c. 55, and the surveyor refers to the printed case, No. 1154, decided by the judges in respect to the liability of the officers of the Westminster Hospital, at the rate of 1s. 9d. for each window in their several apartments, and which decision was given subsequent to the passing of the Act 6 Geo. 4, c. 7.

The commissioners beg to observe, that in the case, No. 1154, referred to by the surveyor, the attention of the judges was not called to the distinction between rule 8, for charging public hospitals, and case 2 of exemptions, or rule for charging hospitals provided for the reception of poor persons; nor was their attention called to the 6 Geo. 4, repealing the duties on dwelling-houses containing not more than seven windows.

Given under our hands this 7th day of January, 1842.

JAMES MANSFIELD,
JOHN TILL,
EDWARD BAYLIS,
} Commissioners.

29th June, 1842.—We are of opinion that the determination of the commissioners is right.

J. PATTESON,
J. WILLIAMS.

From the Justice of the Peace, Aug. 1842.

DEATH FROM THOMSONISM. — Dr. John Butterfield, of Lowell, Mass., reports, in the *Boston Journal* for May 11th, a case of erysipelas, "in the onset not severe," in which the patient was treated by a Thomsonian quack. He took capsicum, was put through a regular *course*, and finally steamed three times in twenty-four hours! In a state of coma with convulsions, he was handed over to the "regulars," and died after lingering a short time.—*Philadelphia Med. Examiner.*

THE LANCET.

London, Saturday, September 10, 1842.

We have this week received,—but not in sufficient time to publish it until the issue of the next number of THE LANCET,—an article of very remarkable excellence and interest, from the pen of Mr. EDMONDS, Actuary of the LEGAL AND GENERAL ASSURANCE OFFICE, in Fleet-street, the history and an outline of which we shall give in this place. Its origin takes date from the publication, about six months ago, of a statement by the AMICABLE ASSURANCE SOCIETY, of the mortality experienced by the members of that society during the thirty-three years preceding the 5th of April, 1841. Mr. EDMONDS had made an investigation of the facts therein given, and wished to compare the results with the results of his previous observation on the mortality of the members of the EQUITABLE ASSURANCE SOCIETY which appeared in THE LANCET of October 28, 1837, page 154, But he found that the comparison could not be readily and directly instituted, in consequence of the classifications which he had made of the facts in the two observations being, in some degree, different. He was hence led to desire to institute, and afterwards undertake, an entirely new investigation of the facts reported by the EQUITABLE. The results of his labour are embodied in the form of a complete analysis of all the information that was capable of being extracted from the *two* observations on the members of the AMICABLE and EQUITABLE Societies, his present classification of the facts being of a more general, and, as Mr. EDMONDS considers, a more useful character than that which was previously adopted by him, in the case of the EQUITABLE, in the year 1837.

In noticing the fruits of these two observations we may here mention that the results arrived at from both observations are entirely confirmatory of Mr. EDMONDS' theory of human mortality, at least among adults,

to whom the observations are confined. This theory is, that *up to the* AGE OF ABOUT FIFTY-FIVE YEARS the mortality increases at the constant rate of THREE PER CENT. *for each advance of one year in age, and that* AFTER THE AGE OF FIFTY-FIVE YEARS *the mortality increases at the constant rate of* EIGHT PER CENT. *for* EACH YEAR.

One of the most valuable and interesting results now obtained consists in the fact that the mean age of fifty-two years is the point at which the mortality passes from the regulation of the *first* to that of the *second* constant of increase. The observations of the AMICABLE and EQUITABLE offices are in perfect agreement in this respect. No tables of mortality in common use have, however, shown this limit to have been obtained at an earlier age than fifty-five years.

Another important result of the two observations has reference to the effect of selection on newly-admitted members. In both Societies, at any given age, the mortality of members who had been admitted at a period *more* than five years distant, is much greater than the mortality of members who had been admitted at a period *less* than five years previous; but the difference is greater in the AMICABLE than it is in the EQUITABLE. In the AMICABLE, at any given age, the mortality of the older members exceeds that of the members newly admitted, by 50 per cent. In the EQUITABLE the excess is 34 per cent.

In both Societies the laws of mortality *under* 55 years of age for the *older* members, and for the *newly-admitted* members, are different. The mortality of the older members is subject to the same law of increase, according to age, as is indicated by theory, and by all good observations on mortality; but the mortality of newly-admitted members during some periods does not increase at all, and is even retrogressive with the age.

Exclusive of the newly-admitted members, the total absolute mortality in the AMICABLE, at every age, is 8 per cent. greater than that in the EQUITABLE at the same age. The mortality, which is half-way between that given by the EQUITABLE and that given by the AMICABLE, agrees in a surprising degree with Mr. EDMONDS' chief theoretical table, designated "Mean Mortality," published by him ten years ago, and used as the basis of a series of annuity and assurance tables, as extensive as any before published. The mortality at any age, according to that table, is exactly 20 per cent., or one-fifth part greater than that shown by the Carlisle Table at the same age.

The present observations of the AMICABLE and EQUITABLE offices are the only two extant in which the means are afforded of making the important distinction of the mortality of *newly-admitted* members from that of the *older* members at the same ages. Other observations, made on the mortality of mixed or general population, rest upon statements which are unsupported by evidence, and which derive their chief value from the probability that the errors with which they abound extend as much in one direction as in the opposite, and, consequently, neutralise or destroy one another. All the facts reported by the EQUITABLE and AMICABLE Assurance Societies are individually supported by evidence as strong as any that is attainable. On this account, and on account of the distinction of the mortality of members in the different years from their admission, the present two observations of the AMICABLE and EQUITABLE Societies stand alone,—far, in fact, above the competition of any other observations.

THE election to the vacant office in the LOCK HOSPITAL has terminated precisely as we had hoped and anticipated. The governors of that charity have thus discharged their duty on this occasion in a manner which entitles their institution to the confidence of the public, and in electing the best qualified candidate for filling an important office, apart from every other consideration but that of affording to the suffering inmates the best guarantee for relief from their dreadful maladies, the governors have furnished an example to the directors of other charitable institutions, which may always be followed with advan-

tage, and never can be departed from excepting through errors of judgment, or from motives which must be far from being commendable. We heartily congratulate Mr. LANE on his appointment, and feel confident that the announcement will be hailed with satisfaction by an immense majority of the members of our profession.

To the Editor of THE LANCET.

SIR,—In consequence of your acting as coroner in a metropolitan county, and as your experience and example must have great weight throughout the kingdom, I beg to ask you a question founded on the following facts. A short time since, in this neighbourhood, the two cases occurred which I am about to describe. A carter, on returning with a load of hay, fell in the road immediately before the near wheel of his cart, which crushed his body dreadfully and killed him on the spot. He did not move or speak afterwards. I was sent for, and attended immediately, a distance of several miles, but my presence was of no use. Three men and a boy witnessed the accident. In the second case the wife of a blacksmith was at breakfast with her son, a young man, her sister, and a lodger in the house. While eating some broth she dropped from her chair, and expired, instantly, it is said, as she was never seen to move again. I was sent for in this case also, and went at once, but I did not reach the house (as it was six miles and a quarter from my residence) until the woman had been dead two hours. Now, Sir, as in both of these cases inquests were held, and I was not summoned on either occasion, I am very desirous of learning—and I am sure that many of my professional brethren in this quarter would be equally anxious to know—if this was correct conduct on the part of the coroner; and I shall be greatly obliged if you will address to me a private answer to the question. I am, &c.

P.S.—I should add, that I did not obtain from the relatives a farthing for my attendance in either case.

The letter which we here insert has been selected for publication from a large number which have been addressed to us on a similar subject. We have excluded all names, and believe it to be right to answer it publicly.

More misapprehension appears to prevail with regard to the respective duties of coroners and medical practitioners in the holding of inquests than on any other subject with which we are acquainted. It is a complaint, repeatedly urged by medical gentlemen, that they are not called as witnesses at inquests. This is a current complaint, and we are not at this moment conscious of a similar one being urged by any other class of the community, with respect to this or any other species of inquiry. Far be it from us to allege that the complaints of our professional brethren on this head are always made without foundation, but at the same time we are bound to state that it appears to us that, in a majority of instances, they are groundlessly advanced. In the cases mentioned by the correspondent whose letter we have just inserted, the coroner was not only justified in *not* summoning the medical practitioner, but he would have been fairly chargeable with improperly applying the public money which is entrusted to his distribution, if he *had* summoned the medical practitioner in either of the cases cited. In the first, the poor man was killed on the spot, four persons having witnessed the accident, the body at the same time having been dreadfully crushed. The surgeon arrived long after the death. What could he prove? What information could he furnish to the jury? Assuredly the eye-witnesses of the transaction could supply, and more than supply, the evidence which was required on such an occasion. In the second case, there was equal facility of obtaining from the spectators of the catastrophe the character and nature of the death. The surgeon only comes to observe the cold and lifeless body. In neither case is there mystery, wicked rumour, dark suspicion, or a sign of wrong doing. What, then, is the testimony which the medical practitioner in this case, or which medical gentlemen in other cases of a similar description, can offer, to guide the decision of the jury? "But," exclaims our correspondent, "I was not paid by the relations in either case." Here it is that the shoe pinches in this and all the like cases. As the *relations* did not pay, *the Coroner* ought to have summoned the medical practitioner, in order that the latter might receive his reward *at the inquest!* Any Coroner who summons a surgeon to an inquest for such a

purpose would violate the oath that he has taken, and be guilty of most dishonest conduct in the discharge of his duty. He has no right to summon a medical witness from any such motive. The Medical-Witnesses' Act confers upon him no such power or authority,—offers to him no justification or excuse for such a proceeding. We are quite aware of the hardships which our medical brethren suffer in consequence of their not being paid for their attendance in numerous cases of accident and sudden death occurring to poor persons; but, great as are the losses and annoyances to which they are exposed in such cases, still, nothing could justify a Coroner in summoning a medical practitioner at an inquest merely for the purpose of paying him for services which had been rendered in the character of a medical attendant. The "witness" is simply to be paid as *a witness*, and in no other character; and if the Coroner depart from the rigid rule which he ought to observe in regulating the business of his court, by summoning a person, and paying him, *nominally as a witness*, while the individual is *ostensibly paid in another capacity*, such a Coroner violates his trust, acts most dishonestly by a public fund which is committed to his charge, and by his conduct shows that he is utterly unqualified for occupying the important office in which he is placed.

We should be heartily rejoiced if we could find that our professional brethren had deliberated on this subject dispassionately, and permitted their minds to assume a correct and healthy mode of thinking on the point under consideration.

Pulmonary Consumption: its Prevention and Cure established on new Views of the Pathology of the Disease. By HENRY GILBERT, M.R.C.S.L. 8vo. Renshaw. Pp. 296. 1842.

THIS work is dedicated to Dr. J. Green Gosse, of Norwich, by an old pupil, Mr. H. Gilbert. Mr. Gilbert has studied his subject with "close and unremitting attention for some years, partly in this country, and for some time in Paris, in the clinical wards of Louis;" and we know that he is a sensible and energetic practitioner. We regret to say that he has not done himself justice in this book. He lays it down in his pathology of phthisis, that the disease "consists *primarily in a want of discriminating power in the mouths of the lacteal vessels*, whereby they are so far changed from their natural state, as to admit those inorganisable parts, the residue of the materials of nutrition, which in their normal and healthy state they *instinctively* reject." Now all that we and Mr. Gilbert really know is, that tuberculous matter is found at an early period in the mesenteric glands. Further than this we do not care a pinch of snuff for Mr. Gilbert's theory; and we can only hope that in investigating it he may, like the philosophers who sought the unfound stone, discover some useful truths. His practical remarks and cases are the redeeming parts of the work. We should be glad to see the following cases, and others like them, which are certainly not of every-day occurrence, in greater detail.

In his second edition we have no doubt that Mr. Gilbert will view his lacteals in their true light, and perform experiments to support or upset his theory. In the mean time we hope that, like Louis' dutiful pupil, he will conscientiously observe and record the facts occurring in his practice:—

"CASE I.

"W. M., aged 45, by trade a coppersmith, born of healthy parents, had been in the enjoyment of sound health till within the last twelve months—his chest was well developed, muscles large, dark hair, and hazel eyes; in fact, the entire appearance of this man repelled any idea of his being naturally predisposed to pulmonary consumption. For some years he had addicted himself to intemperate habits, such as dram-drinking, late hours at night, exposure to wet and cold. In consequence, his appetite began to fail him; his muscular strength was much impaired; and for the last fifteen months he was attacked with cough and profuse expectoration: for this he was bled, blistered, and took aperient and expectorant medicines, according to the account of the medical attendant who had charge of him. The cough, however, still continued, with the expectoration: he also had night-sweats, and the other symptoms of hectic.

"At this time I was called in, and I found him in the following state:—considerable emaciation; pulse frequent and rather weak; dyspnœa, more especially on ascending a height; can rest equally well in any position; sleeps badly at night; cough very troublesome, and expectoration profuse. On applying the stethoscope I detected distinct

pectoriloquy under the right clavicle, with cavernous respiration; dulness on percussion over the lower portion of the right lung, with puerile respiration in the superior portion of the left lung.

"Here the indications of cure were obvious—the size of the cavity in the right lung was of small extent; some tubercular infiltration in its lower part. I employed counter-irritation forthwith, first by means of tartar-emetic ointment, and afterwards by a succession of small blisters; attended carefully to the state of the digestive organs; had the patient removed from London to a more healthy situation near town; prescribed a strict regimen, with such medicinal means as might tend to soothe the cough and facilitate expectoration; gave him an occasional opiate at night. At the end of about six weeks there was perceptible improvement in all the symptoms; the patient had evidently gained flesh and strength; cough was considerably diminished, and with it the expectoration; his appetite was restored; the stethoscopic signs were much improved, no pectoriloquy; there was, however, an absence of the vesicular respiratory murmur in the site of the cavity, over a small extent of surface, with dulness on percussion in the same place. After another month the patient was able to resume his ordinary occupation, and still continues free from cough, or any uneasiness with respect to the functions of the respiratory organs. He rigidly adheres to the strict regimen which I originally prescribed for him, and is much improved in every way; in fact, he states that his health is now better than he has felt it for the last six years.

"*Remarks.*—Here was a case well calculated to shake one's faith in the necessity of ulceration for the elimination of tubercular depositions from the lungs. Such elimination was evidently owing to the effects of the well-regulated employment of counter-irritation. We leave it as a problem, for the solution of the physiological pathologist, How was the tubercular deposition, which evidently existed through a considerable portion of the right lung, removed? We must not reject the advantages of a therapeutical agent because we cannot account for its *modus operandi*.

"Case II.

"E. L., a lady, 27 years of age, married, and the mother of four children, rather delicate in appearance, tall, dark eyes and hair, with a narrow chest; parents still living and in good health; brothers and sisters all healthy. This lady consulted me for a cough, which had come on her within the last three months without any obvious cause: the cough was not very severe, but of that character which is popularly termed 'teasing.' She has been for some time subjected to considerable depression of mind, from family annoyances; finds some difficulty in going up a hill, or even in ascending the stairs; her appetite much impaired; flesh rather flaccid; sleeps badly, but can lie indifferently on either side; the expectoration purely of a mucous character.

"On percussing the right side of the chest, there was some dulness on percussion under the right clavicle, the respiratory murmur in the same part being also diminished. I thought I detected a slight mucous râle under the clavicle of this side; this was not, however, very decided; no pectoriloquy.

"Here I prescribed counter-irritation by means of a small blister, which I kept open for some weeks, and after allowing it to heal I examined the same part of the chest again, where, though the vesicular murmur was not quite as loud as in the normal state, still I was decided that no râle was audible in the part. Strict attention was paid to the functions of the skin, those of digestion, &c., and again counter-irritation was resorted to in the same place as before. After a few weeks more there was a decided improvement in her appearance; her cough was entirely gone; her appetite restored; no appearance of hectic now about her; in fact, she now enjoys as good health as she has done for the last seven years.

"Case III.

"A. C., a young gentleman, 17 years of age, of delicate appearance, fair hair, parents healthy, still the body exhibits all the outward signs of a strumous diathesis. In consequence of an attack of hæmoptysis his parents had to remove him from a boarding-school, where he had been residing. This youth never complained of any pulmonary affection previously; had always enjoyed tolerably good health. On being called to see him I examined his chest, but found nothing wrong. I ordered him to be kept perfectly quiet, to sleep in a well-aired room; bled him from the arm to a small amount; applied a blister of the size of half-a-crown, which I kept open for a fortnight; gave him some aperient medicines; prescribed a strict regimen; and since that time (now six months ago) he has had no return of the hæmoptysis, and is able to resume his studies.

"Case IV.

"M. L., a married woman, aged 32, has had several children, and has enjoyed good health until within the last six months, when, in consequence of cold, she was attacked with a rather severe cough, attended with copious expectoration, for which she was bled, blistered, and took some aperient medicine. These means relieved considerably the severity of the fever, and the other more violent symptoms, but the cough and expectoration still continued with but little abatement. On being consulted on the case I as-

certained her state to be as follows:—Chest well developed; emaciation considerable; mucous and sonorous râles on the anterior and posterior part of the chest; in the subclavicular region on the right side there was observable some bronchophony, with the ratio between the inspiratory and expiratory murmurs, as it exists in the normal state, completely subverted. Sound, on percussion, dull on this part of the chest, but with the natural clearness every where else. Here it was evident that tubercular deposition was commencing, but had as yet occurred in but very small quantity. From the very early stage at which the disease was presented to me, I formed rather favourable hopes of preserving my patient's life, in which I was not at all disappointed, as, by the adoption of the means obviously indicated, and by steadily persevering in the treatment, both hygienic and medicinal, the lung was, after the lapse of about two months, perfectly restored to its healthy state.

"Case V.

"J. W., a married man, aged 37, a shoemaker, had indulged, for several years back, in the habitual use of ardent spirits; about twelve months before I saw him he had got a wetting, and was confined to his bed for some days with a cough, pain in the chest, with severe expectoration; for this he was treated in the ordinary way, with bleeding, blistering, &c., which relieved him very much from the more urgent symptoms; still the cough remained, being much worse during the last winter. On percussing the chest there was evident dulness under the left clavicle, with some resonance of the voice in this part: the respiratory murmur was rather indistinct here, and the healthy relations between the inspiratory and expiratory murmurs did not exist. I put him under treatment, and after some time there was an evident improvement in the case; the tuberculous infiltration of the left lung began obviously to diminish, and he began evidently to gain flesh and strength. He again returned to his ordinary employment, and again resumed the use of spirits, the effect of which, after some time, was to induce all the bad symptoms: his cough again became severe; the sputa were occasionally tinged with blood; a cavity became developed in the apex of the left lung; the tuberculisation went on in this lung, extending downwards; hectic fever set in, and the patient sunk at length.

"There never was a case wherein the curability of consumption was more clearly demonstrated than this. When first the patient came under treatment he evidently had tubercular deposition in the left lung, as evidenced by dulness on percussion, bronchial respiration, resonance of the voice, with subversion of the normal ratio between the inspiratory and expiratory murmurs. These signs were removed by treatment; and it is more than probable that, had the patient adhered to the prescribed regimen, he would have lived many years.

"Case VI.

"A naval officer, who had seen much service, and had been exposed to various vicissitudes of climate, complained some time since, on returning home from a voyage to India, of cough, night-sweats, and muco-purulent expectoration; the cough had been on him, more or less severely, for a month or six weeks before his return home: he had been before this attack in the enjoyment of robust health, but had been, for the last few years of his life, addicted to the use of ardent spirits, after which his digestive powers became somewhat deranged; he lost flesh; did not sleep as well as usual; bowels became irregular, sometimes being relaxed, and sometimes costive, with other symptoms of deranged nutrition and digestion. When I saw him he complained of a feeling of tightness and slight pain in the upper part of the chest; he was also somewhat hoarse; had spit blood twice or thrice within the preceding fortnight; sound dull on percussion in the right subclavicular region; the vesicular murmur rather feeble in this same part, with bronchial respiration and resonance. Considering the habitual strength of the patient, and the recent nature of the attack, I adopted the use of small bleedings, applied a small blister to the subclavicular region, which I kept open for about three weeks; removed the deranged state of the digestive functions, and employed such other means as might best eliminate from the system the tubercular matter which I had every reason to suspect was being formed in it. Prescribed strict attention to diet and regimen, and in the course of about two months from the commencement of my treatment the respiratory and digestive apparatus were perfectly restored, all cough and other symptoms of an unfavourable character disappeared, and the patient, having gained his ordinary strength, was soon able to resume his usual employments."

A Practical Treatise on the Diseases of the Scalp. By John E. Erichsen. London: Churchill. 1842. Pp. 192.

Here are nearly two hundred pages of dull and confused compilation on the diseases of the scalp that might have been condensed into a fraction of that number. The author's object appears to have been to endow with mystery and importance a matter of every-day practice, and to accumulate hard names on the heads of her Majesty's devoted subjects, to the utter discomfiture of all simplicity of practice. Overweening conceit peers

out from every page; and the writer, while he upbraids his seniors for their want of discrimination in the diseases on which he disserts, evidently mistakes his own ignorance for the assumed want of knowledge of his professional brethren. The only novelty that we perceive in the volume is an attempt, and a puny one it must be confessed, to show an identity between the matter of favus and tuberculous deposit. The main argument employed for this proof is the colour of the two substances, and the author's eyes and imagination are so replete with tubercle, that the contagion of the one and the non-contagion of the other, are but as transparent glass in the path of his flimsy hypothesis. As an example of the book-making enterprise of our *scalpist*, we have the oft-told and nauseating recapitulation of the doings of the Greeks and the Romans in skin affections, derivations from and imputations on their harmless conceits; the history of the tomahawk is unfortunately omitted; a full account of the manner of making the pitch-cap; and a pathetic episode on the cruelty of our late able friend, Mr. Plumbe, for pulling out *loose* hairs with a pair of forceps. The plates contain the usual proportion of red and yellow, and happily for their signification have a reference to the names of the disease which they are intended to represent, otherwise there would be little chance of discovering anything else than yellow islands in red seas, and wreaths of smoke and fog issuing out of hydrocephalic craniums.

ZOOLOGICAL SOCIETY OF LONDON.

Tuesday, August 9, 1842.

We give short abstracts of the following papers, which were read by George Gulliver, Esq., F.R.S.:—

On the Blood Corpuscles of British Ophidian Reptiles; with some Remarks on the Figure of the Oval Corpuscles of Vertebrata.

While the blood-discs of the viper and of the snake have the figure most commonly met with in the elliptical blood-discs, the long diameter of which is rather less than twice its short diameter, the blood-discs of the slow-worm have this peculiarity, to wit: their figure is an ellipse, so much elongated that it is considerably more than twice the length of its breadth. The average size of the corpuscles was stated as follows, and the author took occasion to remark, that all his microscopic measurements were invariably expressed in vulgar fractions of an English inch, however they might have been set up in type for the sake of convenience:—

Slow-worm (*Anguis fragilis*, Linn.).

Long Diameter.	Short Diameter.
$\frac{1}{1171}$	$\frac{1}{3222}$

Snake (*Natrix torquata*, Ray).

Long Diameter.	Short Diameter.
$\frac{1}{1371}$	$\frac{1}{3127}$

Viper (*Coluber Berus*, Linn.).

Long Diameter.	Short Diameter.
$\frac{1}{1171}$	$\frac{1}{1305}$

The author remarked, that although the blood-discs of birds and reptiles, when dried on glass, are generally slightly smaller than in the wet state, the blood-discs of mammalia, on the contrary, are almost always somewhat larger when dry than when floating in their own serum, which he thinks may result from the greater delicacy and softness of the latter corpuscles, and which corpuscles he regards as more susceptible than the former of contraction and modifications of form. The envelopes of the blood corpuscles of fishes were stated to be remarkably delicate and evanescent.

Some time since M. Mandl, who justly stated that all observers had agreed that the long diameter of the oval blood-discs of vertebrate animals was never more than one and a half or twice the short diameter, described the corpuscles of the crocodilidæ as forming an exception to this rule, since he found that the corpuscles of *crocodilus Lucius* have the form of a very elongated ellipse. Mr. Gulliver, however, ascertained that the blood-discs of *crocodilus acutus* and of *Champsa fissipes* are not thus elongated, but have the usual elliptical form, as he described in the "Proceedings of the Zoological Society," Nov. 10, 1840.

Subsequently he has shown that, although the usual figure of the blood-discs of the camelidæ and of the oviparous vertebrata is an ellipse of which the long diameter is from one and a half to twice the short diameter, yet there are many exceptions. In other words, the corpuscles may either be comparatively long and narrow, or short and broad; of the former shape the corpuscles of the snowy owl, passenger pigeon, great butcher-bird, nightingale, and snow-bunting, are examples; and of the latter shape examples may be found in the corpuscles of the Java sparrow, and of some other granivorous birds. The measurements of the corpuscles of birds in the author's Appendix to "Gerber's Anatomy" were referred to in illustration; and, as there stated, the nucleus of blood-discs of birds is generally a more elongated ellipse, when exposed to acetic acid, than the unchanged envelope, though to this rule the author stated that there were some exceptions, as in the common fowl.

On the Blood Corpuscles of the Ibex.

Before the author's discovery of the singularly minute size of the blood-discs of the musk-deer (See his paper read at the Royal Medical and Chirurgical Society, Nov. 26, 1839, and published in the twenty-third volume of their Transactions; Dublin Medical Press, Nov. 27, 1839; London and Edinburgh Philosophical Magazine, Dec. 1, 1839; Annals of Natural History of the same date; and Valentin's Repertorium, 1840), those of the goat were the smallest known. He now announces that the corpuscles of the ibex are slightly smaller than those of the goat, and therefore intermediate in size between the corpuscles of the goat and those of the ibex. We subjoin only the averages of the author's measurements:—

Goat (*Capra Hircus*, Linn.), $\frac{1}{2000}$.

Ibex (*Capra Caucasica?*) $\frac{1}{2222}$.

Musk-deer (*Moschus Javanicus*, Pallas), $\frac{1}{3333}$.

ON THE

NUCLEI OF THE BLOOD-CORPUSCLES OF VERTEBRATA.

When the corpuscles of the oviparous vertebrata are mixed with water, or with strong or dilute acetic acid, the nuclei are instantly exposed in the clearest manner, appearing thick, oval, or spherical, and much smaller than their envelopes. Several other vegetable acids and sulphurous acid may be used with the same effect; and the nuclei may also be readily shown by gently moistening with the breath some dry blood on a slip of glass. But when the blood-corpuscles of man and other mammals, not excepting the oval discs of the camelidæ (see Med. Chir. Trans., vol. xxiii., and Lancet, 1840-41,) are treated by any of the means just specified, and precisely under the same circumstances, no similar nuclei will be observed, unless in very young embryos; for the corpuscles of these enclose an obvious though temporary nucleus, which corresponds to the persistent nucleus of the corpuscles of oviparous vertebrata. As stated by the author in the Appendix to "Gerber's Anatomy," pp. 13 and 30, this does not prove that the corpuscles of mammals have no central matter, although he infers that these corpuscles have no nucleus like that contained in the corpuscles of the lower vertebrate animals.

The author then gives two figures to show the effect of several reagents, and especially of repeated washing with water till all the colouring matter is removed, on the corpuscles of mammals and of the lower vertebrata. He shows, as he had formerly stated (Phil. Mag., for Feb., 1840, § 3, vol. xvi., p. 106-7,) that the corpuscles of man, for example, are merely reduced about one-third or one-fourth in size, after completely removing their colouring matter by repeated additions of large quantities of water; when the washed corpuscles appear very faint, flat, and pellucid, presenting no appearance of a nucleus, even when treated with acids and other reagents: nor do these washed blood-discs agree in any respect with the particles which have been commonly described as the nuclei of the discs. Now, when all the colouring matter is removed in like manner from the corpuscles of any of the lower vertebrata, the goose, for example, both the envelopes and nuclei remain, are easily distinguishable as distinct parts, both appearing circular, and the nucleus with its component molecules or nucleoli. When exposed by acetic acid the same nuclei present an oval form. Dilute muriatic acid scarcely affects the form of the envelope, but shows the nucleus with an appearance of granular matter around it. The same acid makes the corpuscles of a mammal appear puckered and shrunk, notched at the edges, or granulated; some presenting a distinct central spot, irregular at the margin, like a granular nucleus; others remaining smooth but misshapen, generally with a dark or brilliant central spot, according to the focus in which they are viewed. (From Mr. Gulliver's Contributions to Minute Anatomy, Lond. and Edinb. Phil. Mag., August, 1842.)

ON THE STRUCTURE OF FIBRINE.

The author, referring to his description and plates (in the English version of Gerber's Anatomy) of the fibrils and the organic germs, or nucleated nuclei, in pale or colourless clots of fibrine, now figures similar corpuscles, though of a ruddy colour, in the red parts often found towards the edges of such clots of fibrine. He is disposed to regard all these germs as nearly allied to blood-corpuscles, especially as Dr. Barry has so well asked, How many tissues there are which the corpuscles of the blood may not form? It is remarkable, however, that both the ruddy and the pale organic germs in fibrinous clots are irregular in shape, and exhibit nuclei when treated with acetic acid, while precisely the same treatment does not show any nuclei in the free or floating blood-discs. If, therefore, the organic germs in fibrine be blood-corpuscles entangled in the clot, these corpuscles must have undergone changes both in form as well as in chemical characters. A figure is given in which the germs are exhibited in a net-work of delicate fibrils, together with many very minute circular molecules. The fibrils are also depicted in fibrine obtained by washing from the blood of the oviparous vertebrata, which fibrine is further characterised by containing many particles similar to, and probably identical

with, the nuclei of the blood-corpuscles. (Mr. Gulliver's Contributions to Minute Anatomy, Lond. and Edinb. Phil. Mag., for August, 1842.)

BLACK PITCH PILLS DURING PREGNANCY.

To the Editor.—Sir, in your Number for September 3, I perceive a note from E. Harvey, Esq., requesting my reason for not recommending black pitch in piles during pregnancy. In several cases where I gave the pills, the formula of which you published in your Journal for August, I was induced to believe that premature labour had been excited by their influence; the mere suspicion of such an effect is sufficient to prevent their administration, and it was by looking back on the cases treated with the pills, and an equal number that were not, that my conclusions were arrived at. I am, Sir, yours most respectfully,

T. H. WARDLEWORTH.

Cheetham-hill, Sept. 5, 1842.

MR. LANGSTAFF'S MUSEUM.

By an advertisement on our cover of this week, it will be perceived that the announcement of sale by auction of this valuable collection, is made for the latter end of this month. As a pathological museum this collection has obtained a very high and deserved reputation both in this country and on the continent.

LITERARY INTELLIGENCE.

MR. CHURCHILL is preparing for immediate publication:—

A System of Practical Surgery: illustrated with 220 woodcuts. By William Fergusson, F.R.S.E., Professor of Surgery in King's College, London, &c.

Diseases of the Skin: a Practical and Theoretical Treatise on the Diagnosis, Pathology, and Treatment of Cutaneous Diseases; arranged according to a Natural System of Classification, and preceded by an Outline of the Anatomy and Physiology of the Skin. By Erasmus Wilson, Lecturer on Anatomy and Physiology in the Middlesex Hospital Medical School, &c. &c.

Practical Observations in Midwifery; with Cases in Illustration. Second Edition, with additions; to be comprised in one 8vo. volume. By John Ramsbotham, M.D., late Lecturer on Midwifery at the London Hospital, Consulting Physician to the Royal Maternity Charity, &c. &c.

A Manual of Medical Jurisprudence. By Alfred S. Taylor, Lecturer on Medical Jurisprudence and Chemistry at Guy's Hospital, &c.

Clinical Midwifery: with the Histories of Four Hundred Cases of Difficult Labour and Practical Inferences. By Robert Lee, M.D., F.R.S., Fellow of the Royal College of Physicians, Lecturer on Midwifery at St. George's Hospital, &c. &c.

The Prescriber's Pharmacopœia. By a Practising Physician. Second Edition, revised, with additions.

On the Chemical Discrimination of Vesical Calculi. By E. A. Scharling, Professor of Chemistry in the University of Copenhagen. Translated, with an Appendix containing Practical Directions for the Recognition of Calculi. By S. Elliott Hoskins, M.D.

Principles of Medicine; comprehending General Pathology and Therapeutics. By Charles J. B. Williams, M.D., F.R.S., Professor of Medicine in University College, London.

BOOKS RECEIVED.

On Diseases of the Bladder and Prostate Gland. With Plates. By William Coulson. Third Edition, revised and corrected. London: Longman and Co. 1842. 8vo. Pp. 274.

A Bedside Manual of Physical Diagnosis. Second Edition, revised and enlarged. With an Appendix, containing a Plan for the Registration of Cases, &c. By Charles Cowan, M.D. London: Sherwood and Co. 1842. 16mo. Pp. 99.

CORRESPONDENTS.

To the Editor.—Sir, The other day I was hastily summoned to attend a youngster, aged four years, who was reported to have swallowed a halfpenny. An emetic was instantly given, the repeated operation of which brought up nothing but the alimentary contents of the stomach; and castor-oil, which was afterwards administered, failed altogether in its action on the bowels: but after a lapse of four hours the coin was violently ejected from the throat, unaccompanied by any other ingesta. I am, Sir, yours, A CONSTANT READER.—Sunderland, Sept. 2.

The notice under the head "University College Medical School," at p. 800 of the last LANCET, should have been preceded by the words *From a Correspondent.*

We have been utterly unable this week to give even an abstract of the reply of *Mr. Reeves* to the statements of Mr. Elliot.

Tyro.—The notice was not, and such notices never are, from the pen of the publisher. There are also many other such productions on sale at the medical booksellers, whose advertisements may be consulted.

What ground has *X. C.* for believing that he could obtain that important portion of the task, the revision, effected? If he write again, his letter must be accompanied (in confidence) by a name and address.